MERRY MATH-II
A Textbook of Mathematics For Class-II

For Free Distribution

**The Jammu & Kashmir
State Board of School Education
Jammu/ Srinagar**

Foreword

The Jammu and Kashmir State Board of School Education embarked on the mission of reviewing and revising the school curriculum on the guidelines of NCF-2005. Any change in school curriculum at any class necessitates a chance in preceding and following classes. The textbook of Mathematics for class-I has already been done. The contents of the textbook of Mathematics for class II entitled Merry Math-II have thoroughly been discussed with the experts and teachers. Every attempt has been made to present Mathematics in a joyful and play way manner. Besides whatever local material in term of teaching aids particularly in terms of low cost / no cost aids have been kept in view while deciding the contents of this textbook. How far the textbook is going to meet the demands of students and how teachers find this book remains to be seen. But it is to be borne in mind that while transacting the contents in classroom with the student the major thrust shall be on igniting pupils mind rather than resorting to help pupil memorizing things. The teachers are expected to exploit what ever knowledge pupils have and then construct further knowledge.

It is fervently hoped that teachers will share their opinions about the contents of the books with us and any worthwhile suggestions will be given due consideration.

I am thankful to Dr. Sheikh Bashir Ahmad, Secretary BOSE who anchors the review / revision programme of Academic and Curriculum Development and Research wing. I placed on record my appreciation for Mr. M.D. Zargar, Deputy Director Academics Kashmir and Ms. Aaliya Qayoom, Academic Officer Mathematics for their efforts and dedication in bringing forth this revised book.

Prof (Dr) D.B.Gupta
Chairman
The Jammu and Kashmir
State Board of School Education

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Chapter 1

Counting in Groups

Look and Guess the Number
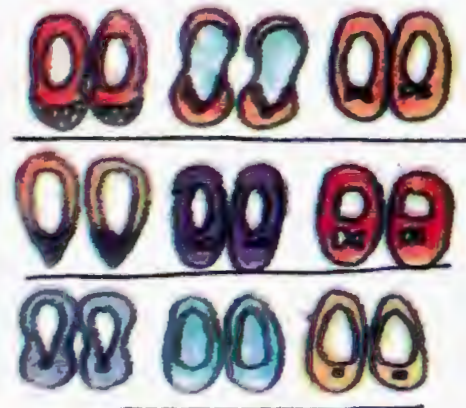
Can you guess how many cups?

Can you guess how many pair of shoes?

3 and 3 is 6 cups and 4 cups below. That should be 10 cups.

There are 3 lines with 3 pair of shoes in each line. That makes 9 pair of shoes.

⊕ Look at how different things are kept in groups. Try to
guess the total number without counting each thing.

_____ glasses

_____ bangles

_____ Pair of earrings

There are three groups of spoons
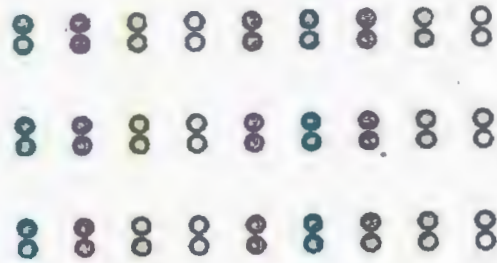
How many in each
group? _____
Guess the total number
of spoons. _____

Ask children to guess the numbers of things around them. The idea here is to encourage
them to look at the arrangement of objects and use the strategy of counting in groups.
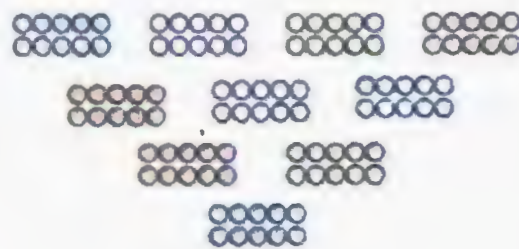
2

Making groups of 2s, 3s and 10s

Groups of 2s

Groups of 3s
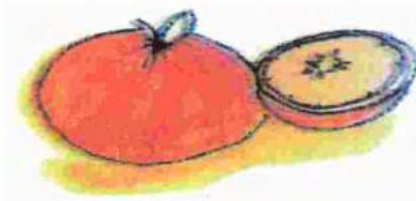
Groups of 10s

More or Less, Let us Guess

Ring the correct answer:

Number of teeth in your mouth

More than 40

Less than 40

Number of seeds in an orange

More than 50

Less than 50

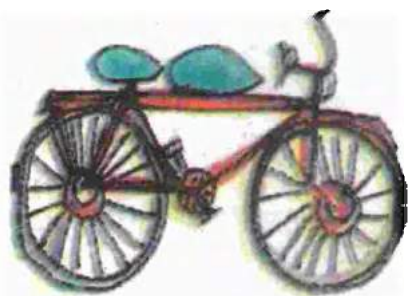Number of matchsticks
in a matchbox

More than 30

Less than 30

Number of pencils in
your class

More than 45

Less than 45

Number of spokes in
one cycle wheel

More than 20

Less than 20

Hop Till You Drop

How many times can you hop on your
right foot without falling? _____

How many times can you hop on your
left foot without falling? _____

Join the Dots

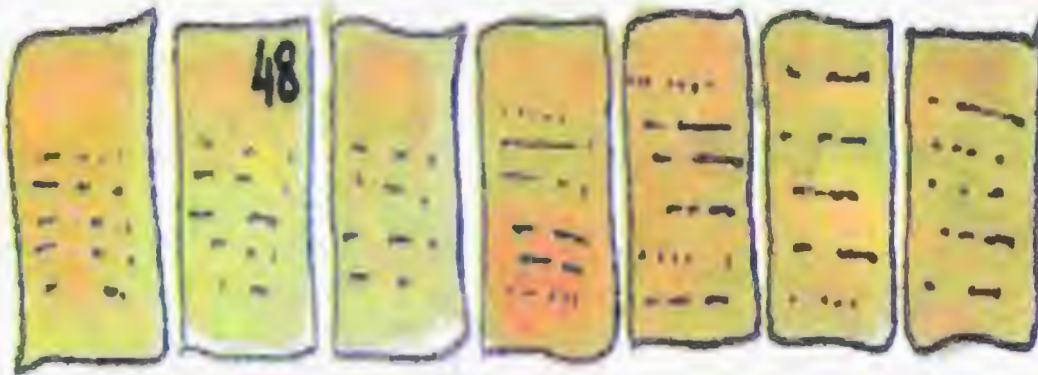Buster doggy is hungry. Join the dots in order, from 21 to 52, and find out what is hidden for him to eat.

Naughty Bhurru

Bhurru has torn some pages of this book.

Write the page numbers in the correct order.

Puzzling Tail

Chipku rat has a long tail.
When he was sleeping, naughty
cat thought of tying his
tail to the poles.

She started from the pole
with the biggest number.
She moved on to the
smaller numbers in order.

Help her in tying.
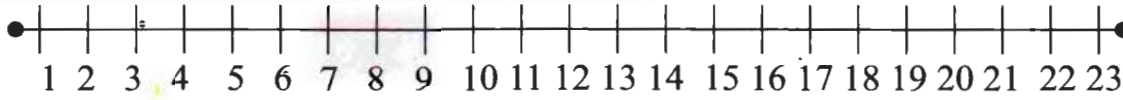But the tail should
not cross itself anywhere.

Deepika's Century

Deepika has made a design with different *bindis*.

- 🙂 Look at the groups and guess the total number of *bindis*.
- 🙂 Draw more groups to complete 100 *bindis*. How many more *bindis* did you have to draw?

Just before, just after and between

8 is just before 9
10 is just before 11
12 is just before 13

14 is just after 13
9 is just after 8
17 is just after 16

7 is between 6 and 8
11 is between 10 and 12
14 is between 13 and 15

Activity Time

1. Fill in the blanks:

[ ] is just before 17	17 is just before [ ]
[ ] is just before 10	21 is just after [ ]
[ ] is just before 19	13 is just after [ ]
[ ] is just before 21	24 is just after [ ]
[ ] is just before 27	39 is just after [ ]

Fill in the blanks:

[   ] is between 14 and 16

[   ] is between 28 and 30

8 is between [   ] and 9

16 is between 15 and [   ]

7 is between [   ] and [   ]

5 is between [   ] and [   ]

10 is between [   ] and [   ]

Speak the number just after:

| 13 | 15 | 16 | 27 | 38 | 42 |

Speak the number just before:

| 10 | 17 | 21 | 42 | 56 | 67 |

Speak the number between:

7 and 9   21 and 23   59 and 61   71 and 73

10 and 12   45 and 47   78 and 80   83 and 85
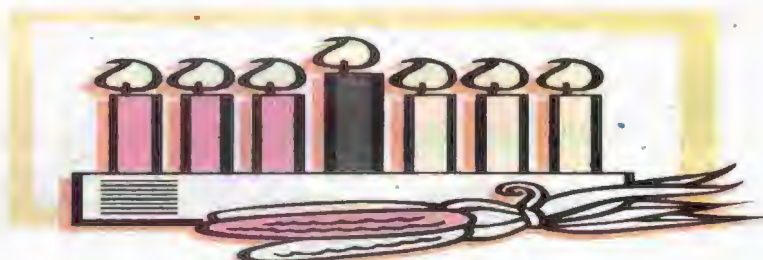
Write numbers in **ascending order**, form:

| 2 to 7 | 2 | 3 | 4 | 5 | 6 | 7 |

Write number in **descending order**, form:

| 2 to 7 | 7 | 6 | 5 | 4 | 3 | 2 |

Arrange the given in **ascending order**:

14   17
71
30   19
37

46   32
60
47   32

12   9
21
45
43

Arrange the given number in **ascending order:**

19   47
52
40
45

56   7
13
9   47
41

48   44
30
22   15
7

Chapter 2

How Much Can You Carry?
The Clever Donkey and His Heavy Sack

Aslam has a   donkey. It carries
sacks full of salt on its back.

On the way to the market they have to cross a   river.

One day, while crossing the   river, the

donkey slipped and fell into the   river.

When it got up, the   sacks felt very light.

⊕ Guess why the   sacks felt lighter?

The donkey was very happy. This also gave it an idea.

Next day, while crossing the   river, the clever

donkey decided to take a dip

Ha! Let me teach it a lesson.

This time Aslam understood

the   donkey 's trick.

Next day Aslam put place of salt.   sacks of woolen cloth in

⊕ Now, what would happen to the   donkey when it dipped into the river? Why?

> As reading skills are not yet fully developed in young children, pictographs serve as visual aids. Children also enjoy pictographs

Munna Wants to Ride a See-Saw
Munna needs a friend to ride a see-saw.

Munni comes to help Munna.
But still Munna cannot ride it.

⊕ Can you tell why? Circle the correct answer.

Munna is heavier/lighter than Munni

Aslam comes to help them.
Look at the picture.

⊕ Can you tell why the see-saw turned this way?

Munna is heavier/lighter than Munni and Aslam together.

*I have an idea!
Let me keep my bag
with me.*

We are all enjoying the ride.

Heavier or Lighter

Which of the two things will make the see-saw go down?
Look at the examples.

Draw a line to match the heavier one.

a)

b)

c)

Colour the one which is lighter.

a)   Tennis Ball   Football

b)   School Bag   Geometry Box

Before doing this activity, let children compare weights of different things by holding them in their hands.
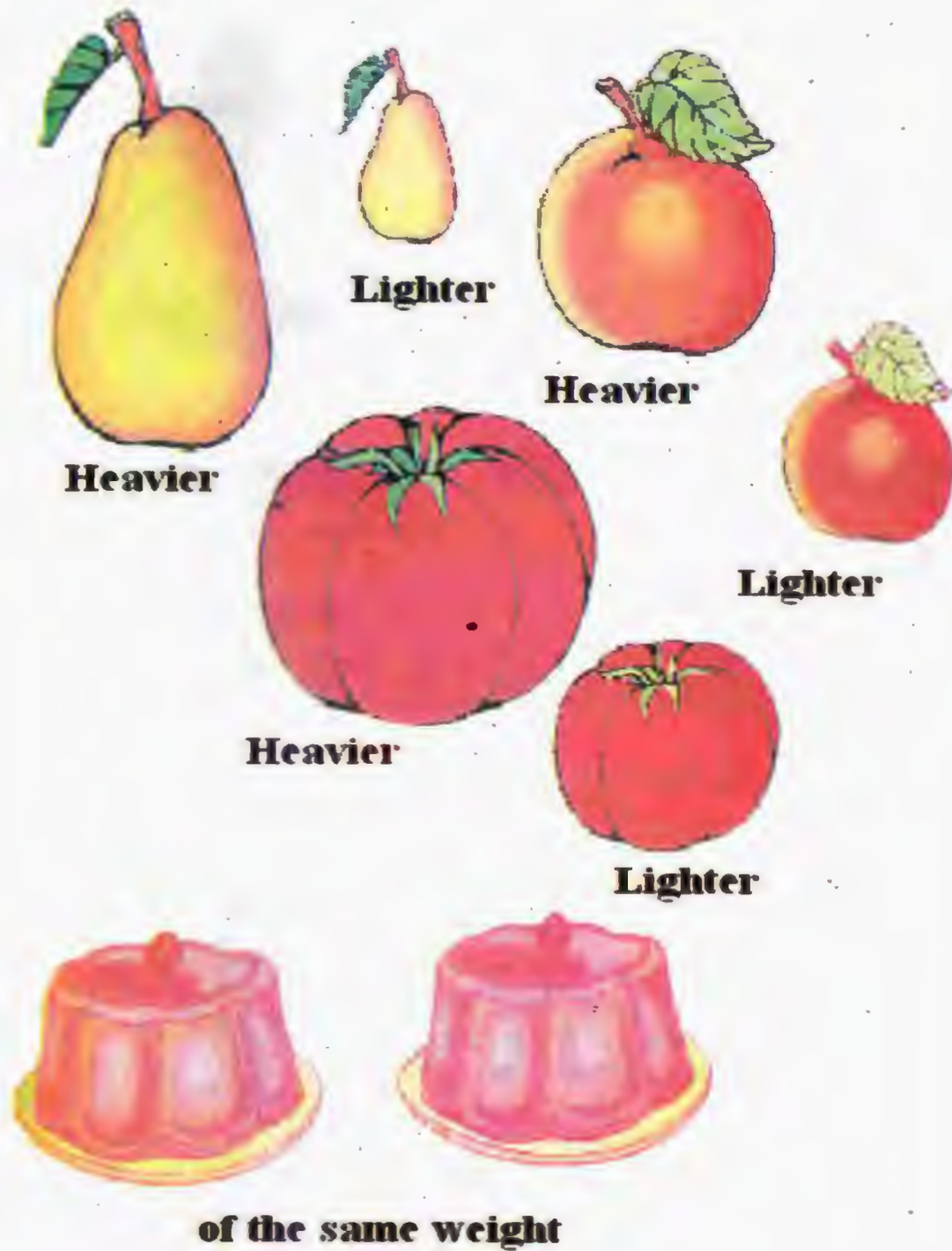
14

TICK (✓) THE HEAVIER

TICK (✓) THE LIGHTER

LIGHTER

HEAVIER

LIGHTER

HEAVIER

HEAVIER

LIGHTER

LIGHTER

HEAVIER

of the same weight

Lighter

Heavier

Heavier

Lighter

Heavier

Lighter

of the same weight
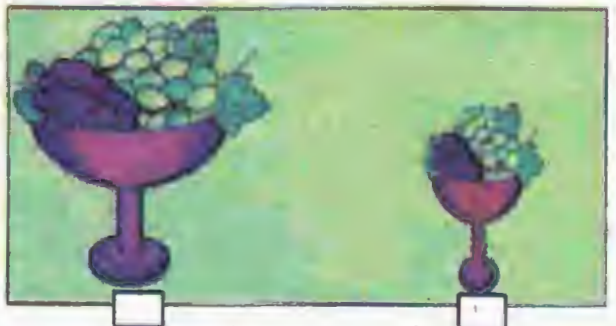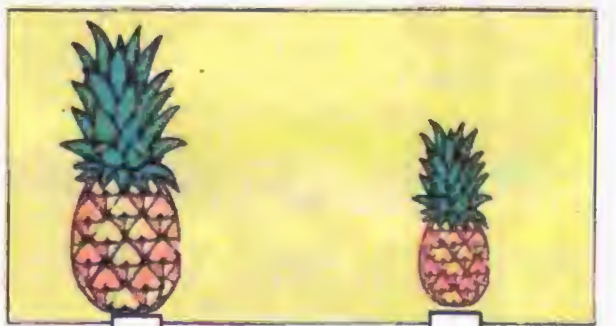
Chhotu Monkey and the Carrots

Chikky and Micky rabbits saw a bag. It had carrots in it.

Chikky and Micky started fighting.

Chhotu monkey came to help.

Chhotu monkey brought something to help them.

⊕ Guess and tell what Chhotu monkey used to help
   Chikky and Micky. Draw a picture of it in the monkey's
   hand.

Find Out

⊕ Your parents buy carrots for the family. How much do
   they buy at one time?
⊕ How does the vegetable seller weigh the carrots?

How Much Can Simran Carry?

Simran's father needs to move some things from the
store of their house to the kitchen.

Simran wants to help her father.

⊕ Guess which bags Simran can carry.
⊕ Guess who can carry what ____

⊕ Her father? _____

⊕ Her mother? _____

⊕ Her younger sister? _____

⊕ Can Simran carry any two of these bags together. If yes, which ones? _____

⊕ Which bags can u carry? Guess. _____

I can carry a grain of sugar bigger than myself!

⊕ Match the picture of the animal with the thing it can carry.

SUGAR

Chapter 3

Counting in Tens

Chickens and the Clever Fox

Insha farmer has many chickens in her farm. One day a clever fox saw these naughty chickens playing around.

From the day, she started stealing and eating chickens every day. Insha came to know about it. She asked the fox.

Hey, do you eat my chickens?

No dear, I am your friend, how can I eat your chickens?

In the morning, she counted her chickens.
⬥ How many baskets of 10 chickens are there? _____

⊕ How many chickens
   are there in all?
   50 + 4 = _____

In the evening, she counted the chickens again.
⊕ There are _____ baskets of 10 chickens.
⊕ There are _____ +3= _____ chickens in all.
⊕ 54- ___ = ____ chickens have been eaten by the fox.

How Many are These?

Bhanu collects sticks from the jungle.
He sells them in the market.

He uses 10 sticks to make
1 bundle.

3 bundles have
_____ sticks.

Now , how many sticks in all are
these?

_____ sticks in all.

4 bundles would have _____ sticks.

Before doing these exercises, ask children to represent numbers by making bundles of 10
with the help of materials such as sticks or beads. Help them link these concrete objects to
written symbols and oral names of the numbers.

There is a wedding in Shuruti's house.
She is making flower garlands.

**She uses 10 flowers
to make 1 garland.**

8 flowers

So there are _____ flowers in all.

How many flowers are these?
_____ flowers in all.

⊕ How many garlands of 10 flowers each can you make
Using 21 flowers? Draw them in the space below.

Anjali, can you see all these pencils? How many are these? If you make a good guess, all these will be yours!

Let us help Anjali.

⊕ How many packets of 10 pencils are there? _____

⊕ How many pencils are outside the packets? _____

⊕ So, altogether there are_____ pencils?

Aarti likes collecting different kinds of bindis.

⊕ How many packets does she have?_____

⊕ So how many bindis in all?

_____

Each packet has
3+4+3 bindis

Now you draw 10 bindis in a different way.

Discuss the strategy used by children for guessing. Encourage them to count in 10's. Also make children notice that 10 bindis can be arranged in different patterns. You may ask children to try different arrangements using 10 bindis which are visually easy to count.

SKIP COUNTING

Skip counting in 2s
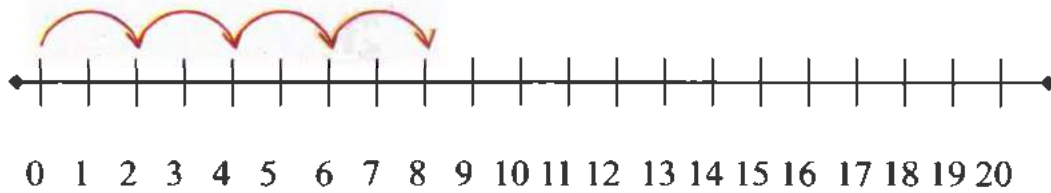
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Skip Counting in 3s

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Skip Counting in 4s

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Skip Counting in 5s

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Skip Counting in 10s

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

32
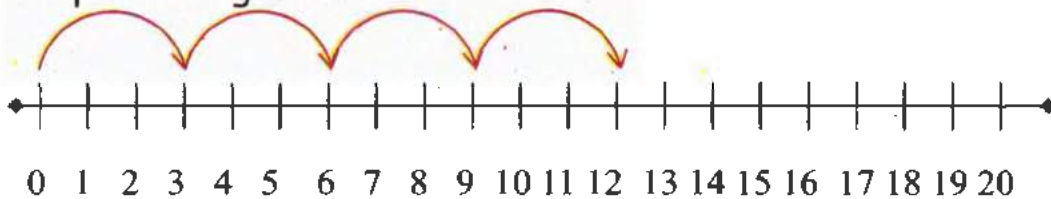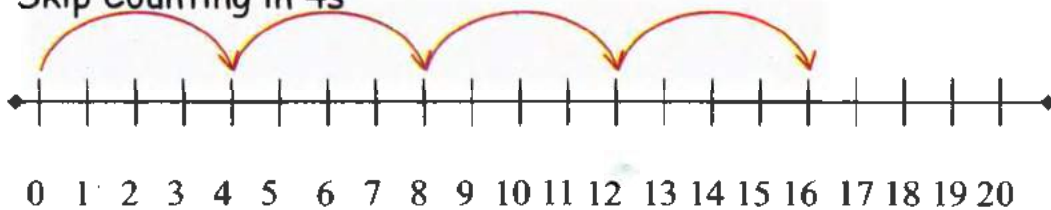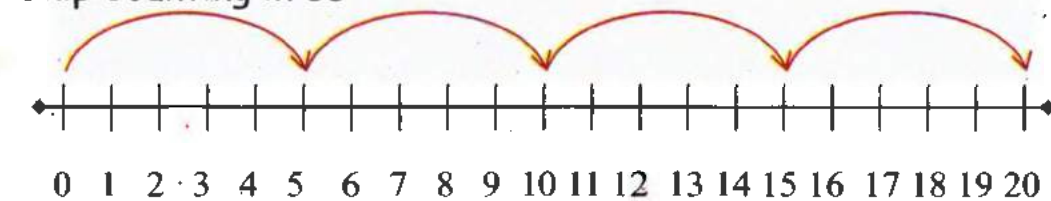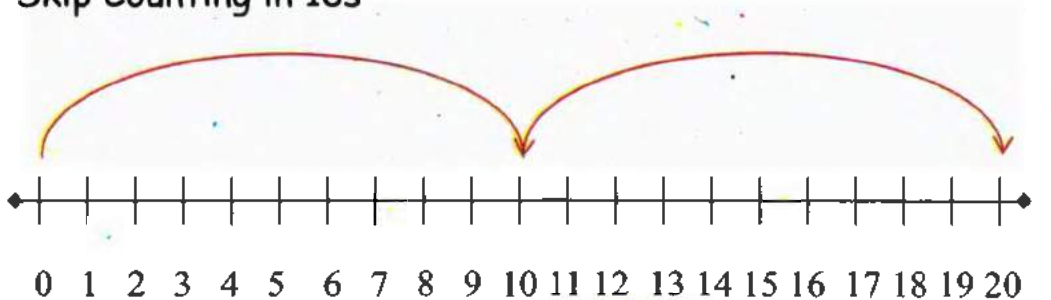
Skip Counting in 2s

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Skip Counting in 3s

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Skip Counting in 3s

21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	.50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Skip Counting in 10s

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

1. Continue the pattern with counting in 10s.
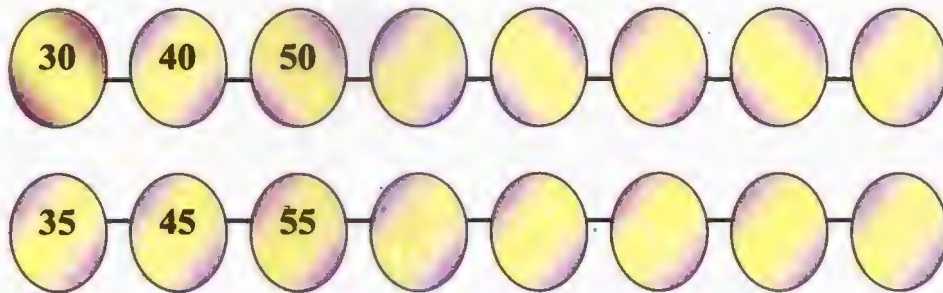
| 30 | 40 | 50 | | | | | |

| 35 | 45 | 55 | | | | | |

2. Continue the pattern with counting in 5s.
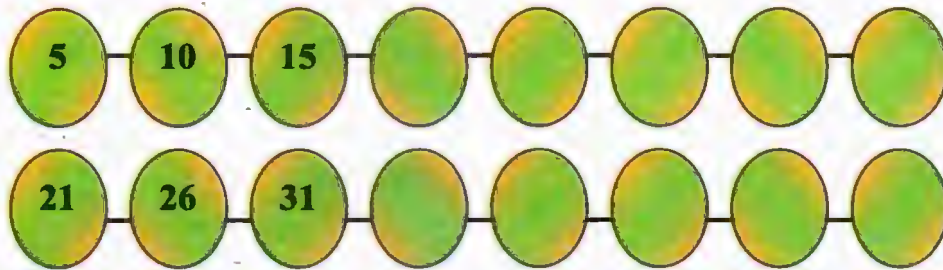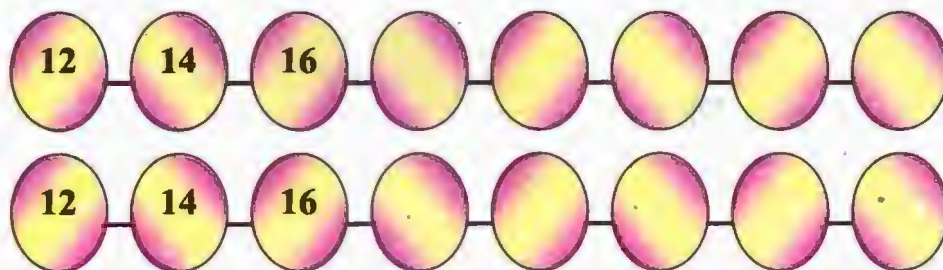
| 5 | 10 | 15 | | | | | |

| 21 | 26 | 31 | | | | | |

3. Continue the pattern with counting in 2s.

| 12 | 14 | 16 | | | | | |

| 12 | 14 | 16 | | | | | |

35

4. Continue the pattern with counting in 10s.

30 40 50 □ □ □ □ □

35 45 55 □ □ □ □ □

5. Continue the pattern with counting in 5s.

5 10 15 □ □ □ □ □

21 26 31 □ □ □ □ □

6. Continue the pattern with counting in 2s.

12 14 16 □ □ □ □ □

19 21 23 □ □ □ □ □

7. Continue the pattern with counting in 3s

| 3 | 6 | 9 | | | | | |
| 15 | 18 | 21 | | | | | |

8. Continue the pattern with counting in 10s

| 20 | 30 | 40 | | | | | |
| 55 | 65 | 75 | | | | | |
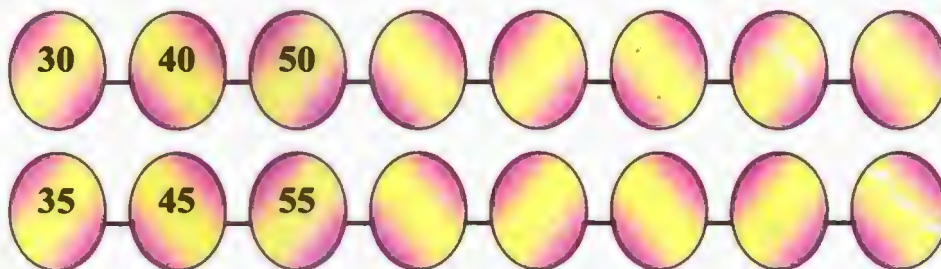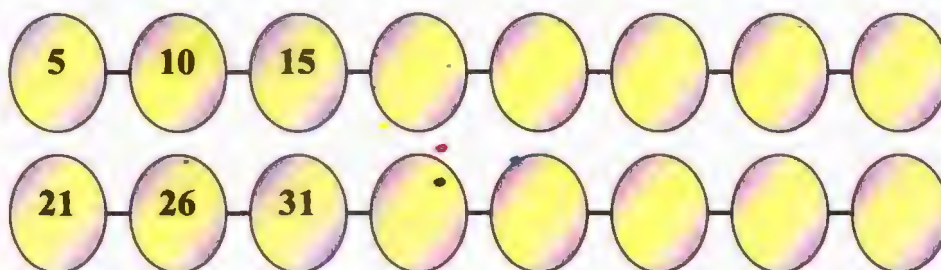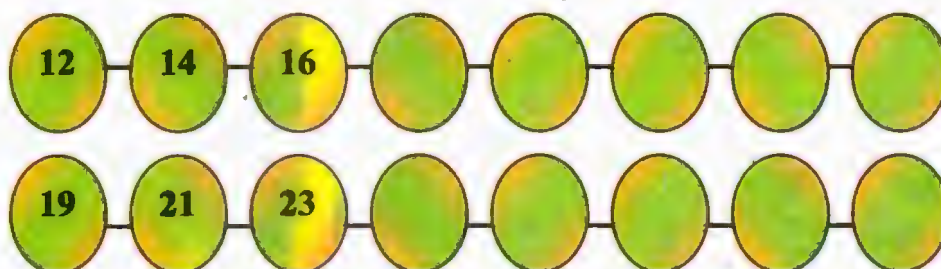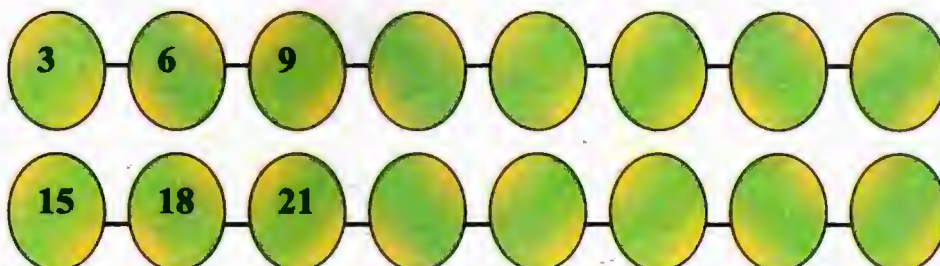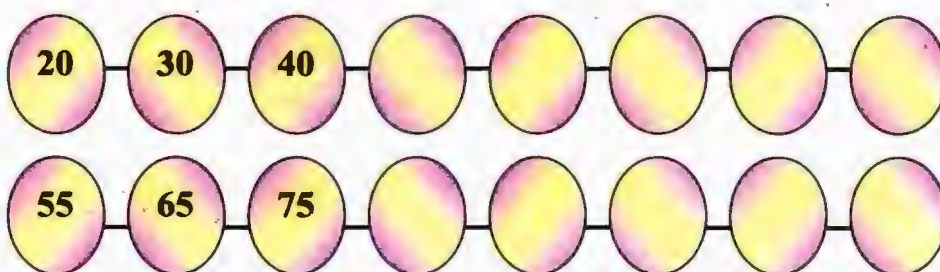
9. Continue the pattern with counting in 5s.

| 10 | 15 | 20 | | | | | |
| 30 | 35 | 40 | | | | | |
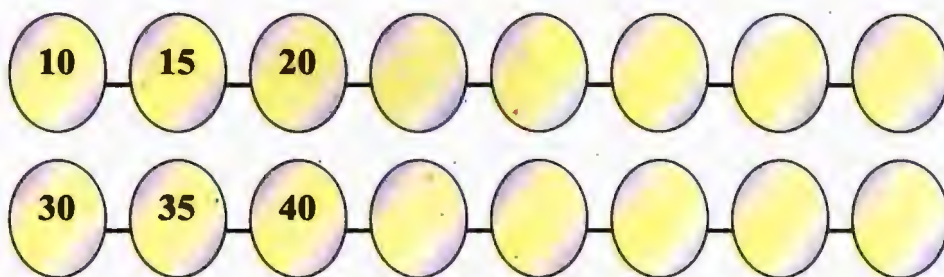
Regrouping of Numbers from Ones to Tens
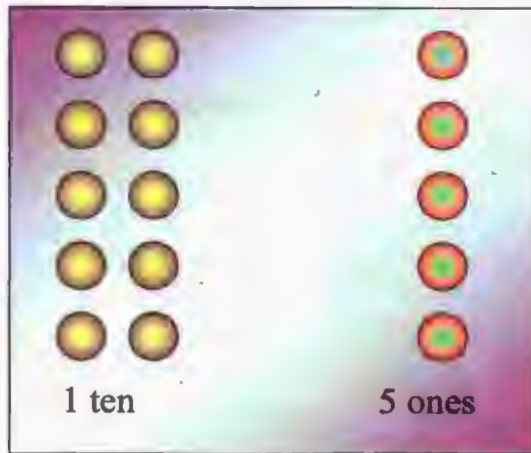
15 ones

1 ten   5 ones

15 ones = 1 ten + 5 ones

15 = 10 + 5

2 tens   15 ones
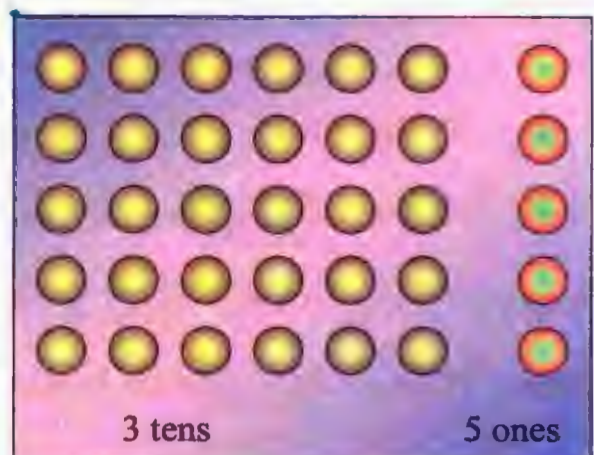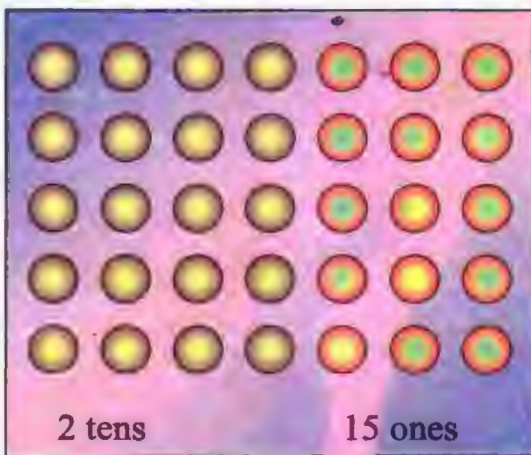
3 tens   5 ones

2 tens + 15 ones = 3 tens + 5 ones

20 + 15 = 30 + 5

In this way,

3 tens + 17 ones = 4 tens + 7 ones

30 + 17 = 40 + 7

5 tens + 11 ones = 6 tens + 1 ones

50 + 11 = 60 + 1

8 tens + 14 ones = 9 tens + 4 ones

80 + 14 = 90 + 4

Also,

$$2 \text{ tens} + 21 \text{ ones} = 4 \text{ tens} + 1 \text{ ones}$$
$$20 + 21 = 40 + 1$$
$$3 \text{ tens} + 23 \text{ ones} = 5 \text{ tens} + 3 \text{ ones}$$
$$30 + 23 = 50 + 3$$
$$7 \text{ tens} + 27 \text{ ones} = 9 \text{ tens} + 7 \text{ ones}$$
$$70 + 27 = 90 + 7$$

1. Fill the blank:

16 ones = [   ] ten + 6 ones

12 ones = [   ] ten + 2 ones

17 ones = 1 ten + [   ] ones

18 ones = 1 ten + [   ] one

3 tens + 11 ones = 4 tens + [   ] one

5 tens + 17 ones = [   ] tens + 7 ones

8 tens + 15 ones = 9 tens + [   ] ones

7 tens + 18 ones = [   ] tens + 8 ones

3 tens + 10 ones = [   ] tens + 0 ones

5 tens + 10 ones = 6 tens + [   ] ones

6 tens = 24 ones = 8 tens + [   ] ones

2. Fill in the blanks:

$20 + 16 =$ ☐ $+ 6$ solution → $20 + 16 =$ 30 $+ 6$

$30 + 15 = 40 +$ ☐ solution → $30 + 15 = 40 +$ 5

$60 + 14 =$ ☐ $+ 4$ $80 + 19 = 90 +$ ☐

$10 + 12 = 20 +$ ☐ $50 + 13 =$ ☐ $+ 3$

$70 + 17 =$ ☐ $+ 7$ $40 + 18 =$ ☐ $+ 8$

$30 + 16 =$ ☐ $+ 6$ $50 + 17 = 60 +$ ☐

$40 + 14 = 50 +$ ☐ $70 + 13 =$ ☐ $+ 3$

$80 + 15 =$ ☐ $+ 5$ $60 + 11 = 70 +$ ☐

$10 + 18 = 20 +$ ☐ $30 + 13 =$ ☐ $+ 3$

$20 + 17 =$ ☐ $+ 7$ $20 + 12 = 30 +$ ☐

$20 + 23 =$ ☐ $+ 3$ $40 + 22 = 60 +$ ☐

$70 + 24 = 90 +$ ☐ $60 + 25 =$ ☐ $+$ ☐ 5

$20 + 16 = 30 +$ ☐ $40 + 19 = 50 +$ ☐

Chapter 4

Tens and Ones

Uncle, I want to buy pencils for 18 rupees. I have just 10 - rupee notes and 1 – rupee coins. How many notes and coins should I give you?

18 rupees means 1 note of 10 rupees And 8 0ne - rupee coins.

How many notes and coins do I need to give 35 rupees?

You give me Three 10-rupee notes and 5 coins of one rupee

Hey!
Just tell me,
how many
pencils do
you want?

OK, Uncle if ...

None! Thank
You Uncle,
for
helping me
With my
homework.
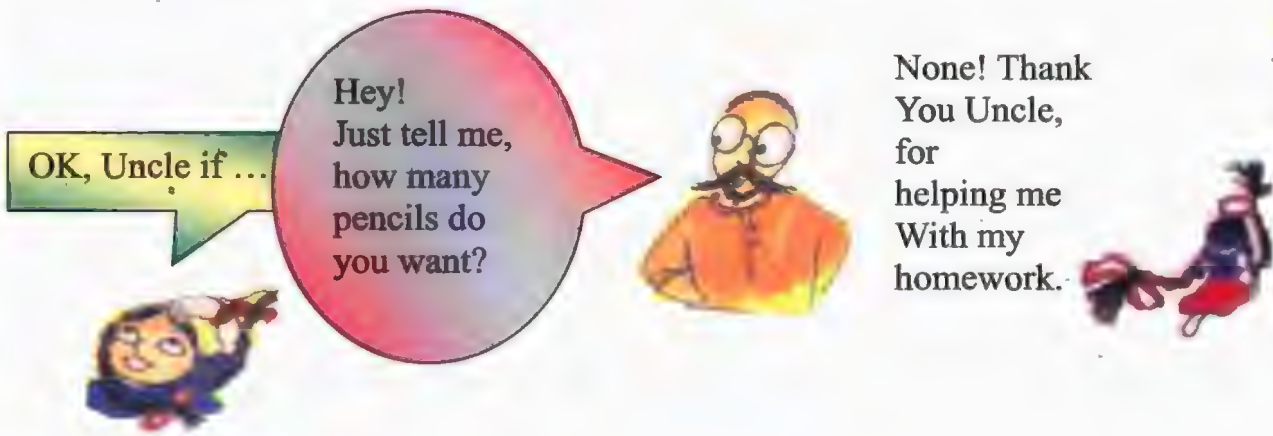
Can you do this without your uncle's help? Draw the 10-rupee notes
and 1-rupee coins you will give for these things.

Rs 20

_____

Rs 32

_____

Rs 55

_____

⊕ How much money do the notes and coins make?

= Rs.30

= Rs _____

= Rs _____

= Rs _____

= Rs _____

Do similar exercises in the class with the help of play money.

Activity Time

I will say a number. Guess the break-up

OK, you say it. I will do it.

60 + 4

Sixty-four?

20 + 5

Twenty-five?

What about 12? How will you do that?

See, for 64 and 25 the number names tell us the break-up. But uhm--- twelve is different. So are eleven and nineteen.
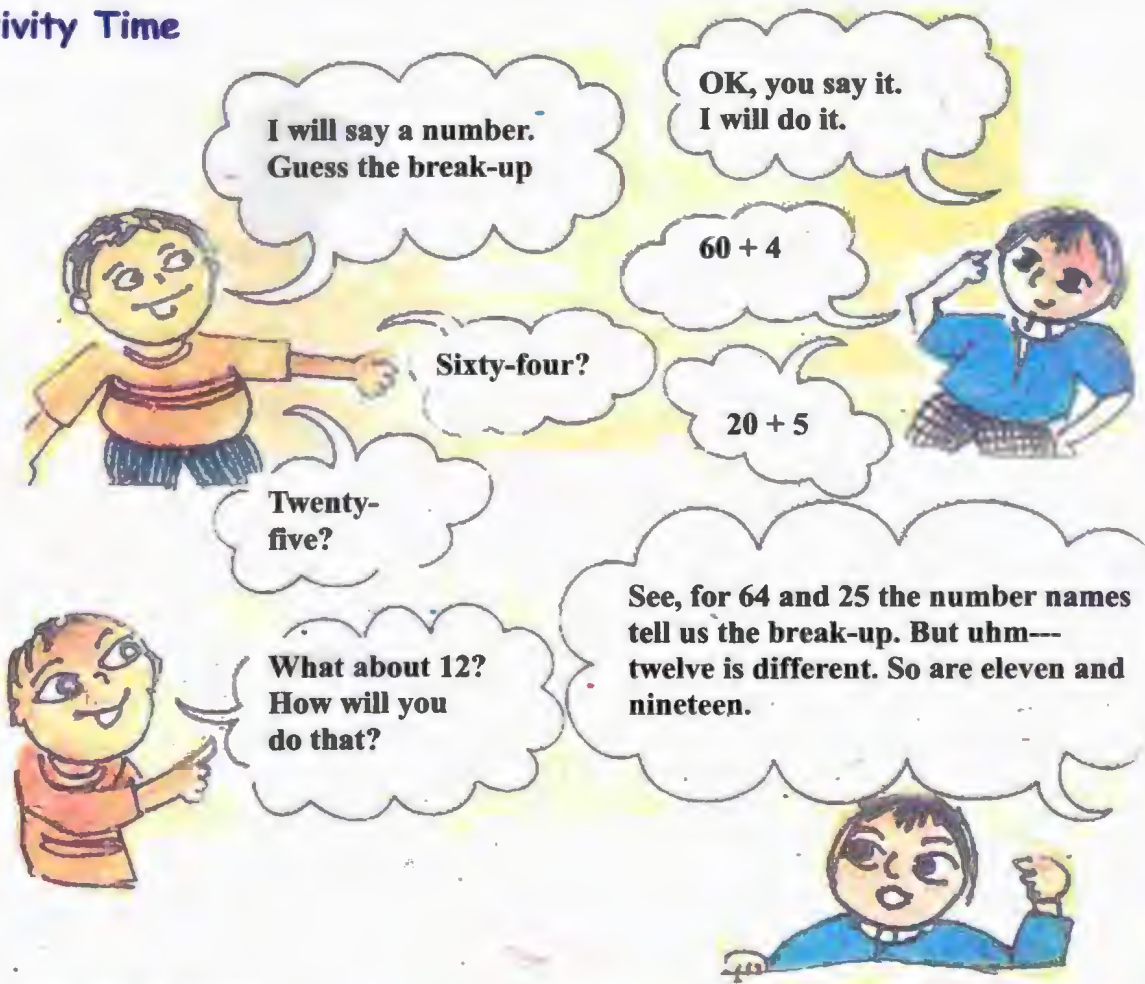
Now you write these and also say them aloud.

$27 + \underline{} + 7$

$31 + 30 + \underline{}$

$54 = \underline{} + \underline{}$

$\underline{} = 90 + 9$

$63 = \underline{} + \underline{}$

$36 = \underline{} + \underline{}$

$\underline{} = 80 + 2$

You try writing the breakup for these.

$12 = 10 + 2$

$19 = \underline{} + 9$

$11 = \underline{} + \underline{}$

$\underline{} = 10 + 7$

Bangle Throw

Usmaan and Kareem are playing a bangle game. Usmaan has thrown the bangle on the dots.

Each big red dot is equal to 10 points. Each small green dot is equal to 1 point.

The dots inside the bangle are

Dots __ ○ ○ ○   ...
                                  ...
                ○

Points   40   4

So, Usmaan has got 44 points.
They throw the bangle twice each. Here are there points

Throw	Usmaan	Kareem	Winner
First	44	13	Usmaan
Second	16	32	Kareem
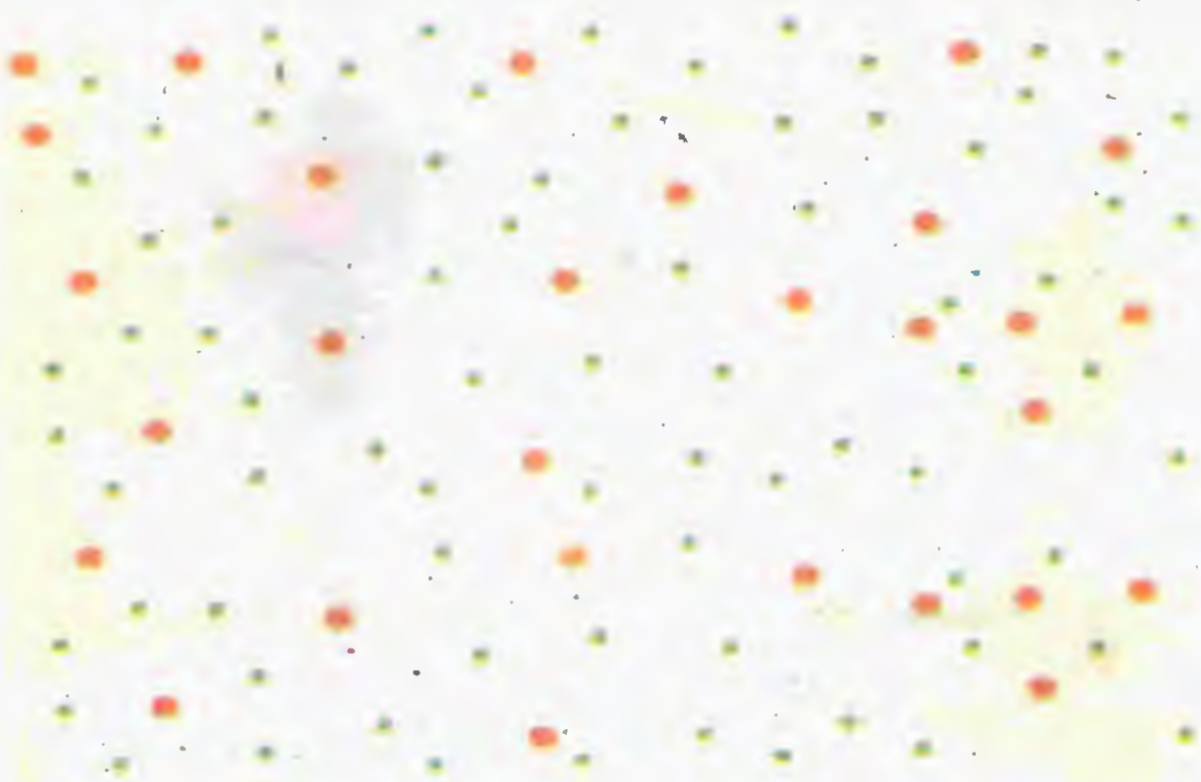
You can play this game with your friend using the board above. Write your points for each throw.

Throw	My Points	My friends points	Winner
First			
Second			
Third			
Fourth			
Fifth			
Sixth			

Encourage children to mentally compute the score.

The Flute Man and the Rats

5 My reward Sir! I have collected 80 rats

But how did you count so many rats
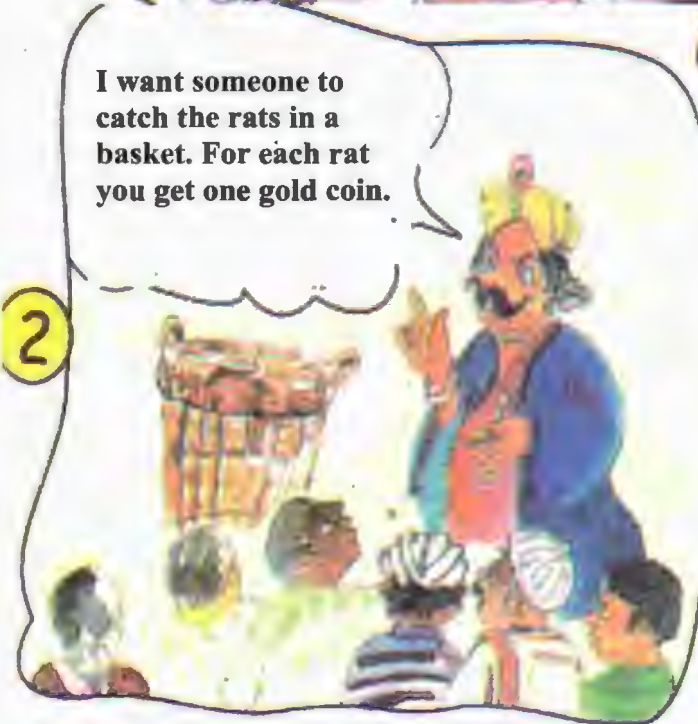
Simple! I used these cards.

I counted one rat and kept one **1** card in my pocket.

1 for one rat

1 **1** for two rats

1 **1** **1** **1** **1** **1** for how many rats? _____

When I had 10 cards, I changed it
with this card **10** in my pocket.

⭐ ⭐ ⟶ **10**

then came 7 more rats. I then had in my pocket

48
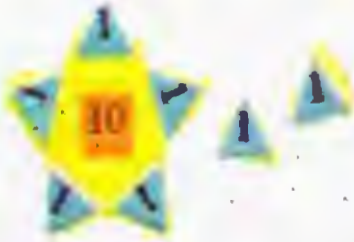
for 17 rats.

Which cards will he have in his pocket if he has counted up to

A] 23 ──────→

B] 47 ──────→

C] 55 ──────→

D] 63 ──────→

E] 72 ──────→

F] 80 ──────→

Encourage children to make token cards and use them in different exercises.

The king gave him gold coins.

⊕ Can you guess what happened next?
⊕ Now act out the story in class.
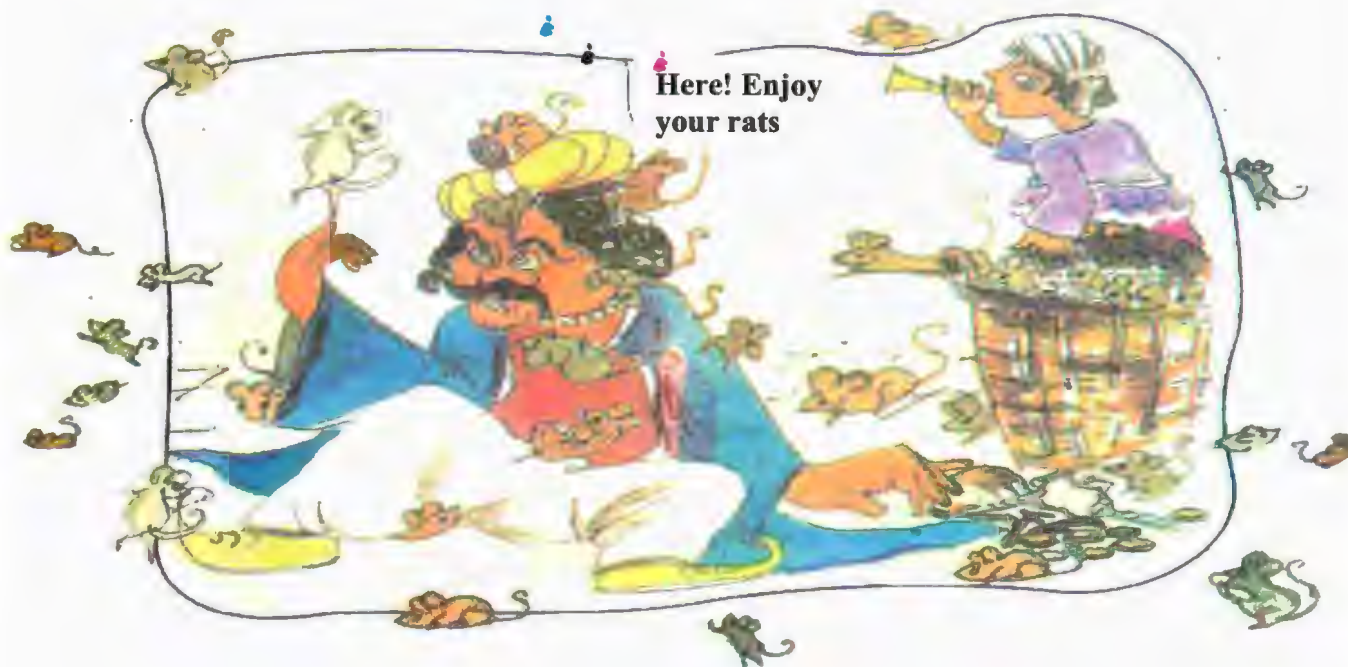
Clean School Day

We have to clean our school today. We make teams. Each team has 10 students.

Our team will clean the best!
Here we go! Rub and Scrub!

The numbers of students
In all the classes are:

Class 1	53
Class 2	42
Class 3	35
Class 4	54
Class 5	26

⊕ How many teams will there be in each class? How many students will be left? Write here.

	How many teams?	Students left
Class 1		
Class 2		
Class 3		
Class 4		
Class 5		

⊕ How many students are left in all? _____
⊕ How many more teams can be made with all these
students left?_____

Activity Time:

Teams of Ten in your school

⊕ Find out the number of children in each class of your
school.

⊕ Make teams of ten for each class.

⊕ How many children are left in each class?

Chapter 5

My Funday

Days of the week

There are seven [7] days in a week. These are:
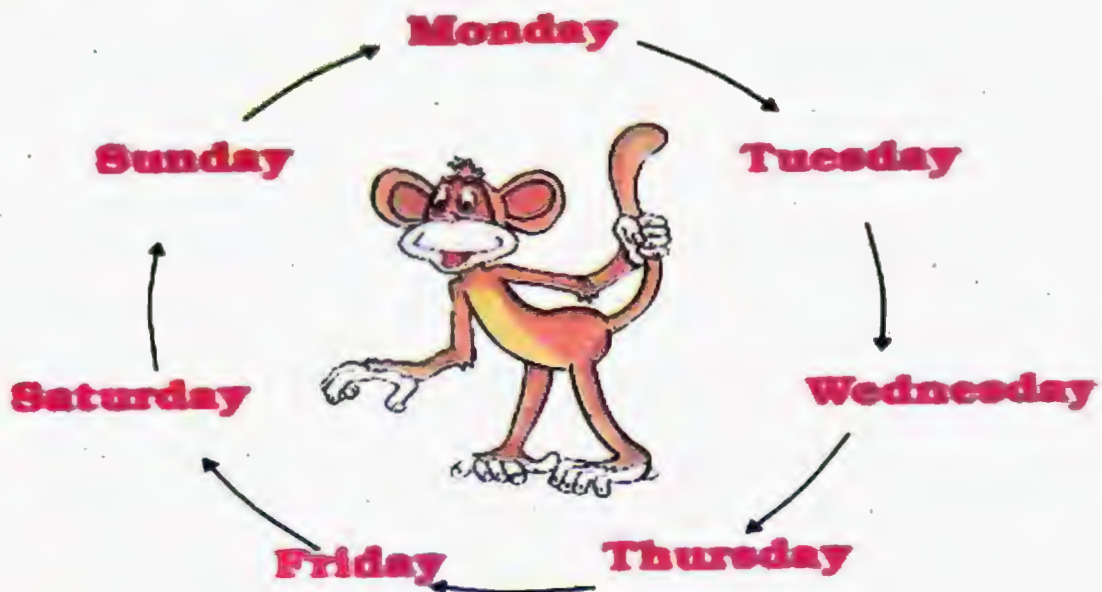
Monday is the first (1st) day of the week.

Tuesday is the second (2nd) day of the week.

Wednesday is the third (3rd) day of the week.

Thursday is the fourth (4th) day of the week.

Friday is the fifth (5th) day of the week.

Saturday is the sixth (6th) day of the week.

Sunday is the seventh (7th) day of the week.

Today,
Yesterday
And tomorrow

If it is Sunday today,
it was Saturday yesterday.

If it is Tuesday today,
it was Monday yesterday.

If it is Friday today,
it will be Saturday tomorrow.

If it was Monday today,
it was Sunday yesterday.

If it is Sunday today,
it will be Monday tomorrow.

if it is Tuesday today,
It will be Wednesday tomorrow.

If it is Saturday today
It was Friday yesterday.

if it is Thursday today,
It will be Friday tomorrow.

One day Monday
went to Tuesday
to see Wednesday
and ask Thursday
to tell Friday
and also Saturday
that Sunday is Funday!

⊕ Is Sunday a funday for you?

⊕ Monday is happy to be the first day of the week. Now you tell ___
a] The third day of the week is _____.

b] The fifth day of the week is _____.

c] The second day of the week is _____.

d] The last day of the week is _____.

⊕ Which day will come

a] After Sunday? _____

b] Before Sunday? _____

While doing this chapter, the use of a calendar would be helpful. Encourage children to refer to a calendar to identify the order of days in sequence.

55

c] After Wednesday? _____

d] Before Wednesday? _____

e] 2 days after Sunday? _____

f] 4 days after Wednesday? _____

g] 7 days after Monday? _____

⊕ Which day do you like most? Why?

⊕ What is the day today? _____

⊕ Which day was it yesterday? _____

⊕ Which day will it be tomorrow? _____

⊕ Which day will it be the day after tomorrow? _____

⊕ Which day was it the day before yesterday? _____

Think, think!
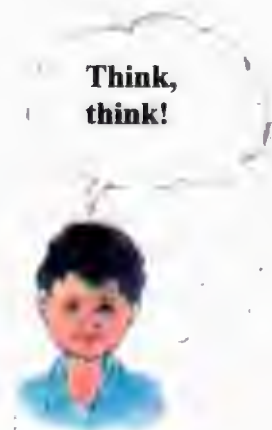
Teacher -Teacher

Some children of class II-A love to play "Teacher-Teacher".
They have decided to take turns in playing the
teacher's role.

Day	Who will play teacher's role
Monday	Aslam
Tuesday	Maria
Wednesday	Usmaan
Thursday	Raju
Friday	Rahul
Saturday	Karim
Sunday	Muskaan

Now fill in the blanks –

a) _____ will be the teacher the day after Friday.

b) _____ will play the teacher's role on the day before Tuesday.

c) Usmaan will play the teacher's role on the day after _____.

d) Rahul will play the teacher's role on the day before _____.

Games Every Day?

Time Table of II-A

Period / Day	1	2	3	4	5	6
Monday	Hindi	Maths	Games	English	E.V.S	Music
Tuesday	Hindi	Maths	Drawing	English	E.V.S	Library
Wednesday	Hindi	Maths	Games	English	E.V.S	Library
Thursday	Hindi	Maths	Drawing	English	E.V.S	Music
Friday	Hindi	Maths	Games	English	E.V.S	Music
Saturday	Hindi	Maths	Drawing	English	E.V.S	Library

Look at the table of Class II-A and fill in the table:

Period	On which days?
Drawing	
Music	
Games	
Library	

⊕ **In Your Class**

a) On which days do you have a games period?

_____

b) How many children would like to have a games period every day?

_____

c) What games do you play in your games period?

_____

d) On which days do you have a drawing period?

_____

e) Do you have a music period? _____

   if yes, on which days? _____

f) Which day of the week do you like best at school?

_____

Favourite Month

One day Dolma, Altaf and Ahmad were talking about their favourite months.

My Favourite months are May and June.

I like December because Christmas comes in December.

I like July and August because it rains in these months.

⊕ Which month do you like best? _____
  Why? _____
⊕ Draw what you like to do in favourite month.

Fill in the table.

What I like best	Months in which it comes
Fruit _____	_____
Vegetable _____	_____
Flower _____	_____

⊕ Write the names of five festivals that you or your friends celebrate. Also, write the months in which these festivals come.

Name of the festival	Months in which it comes

⊕ Draw a scene of any of the festivals.
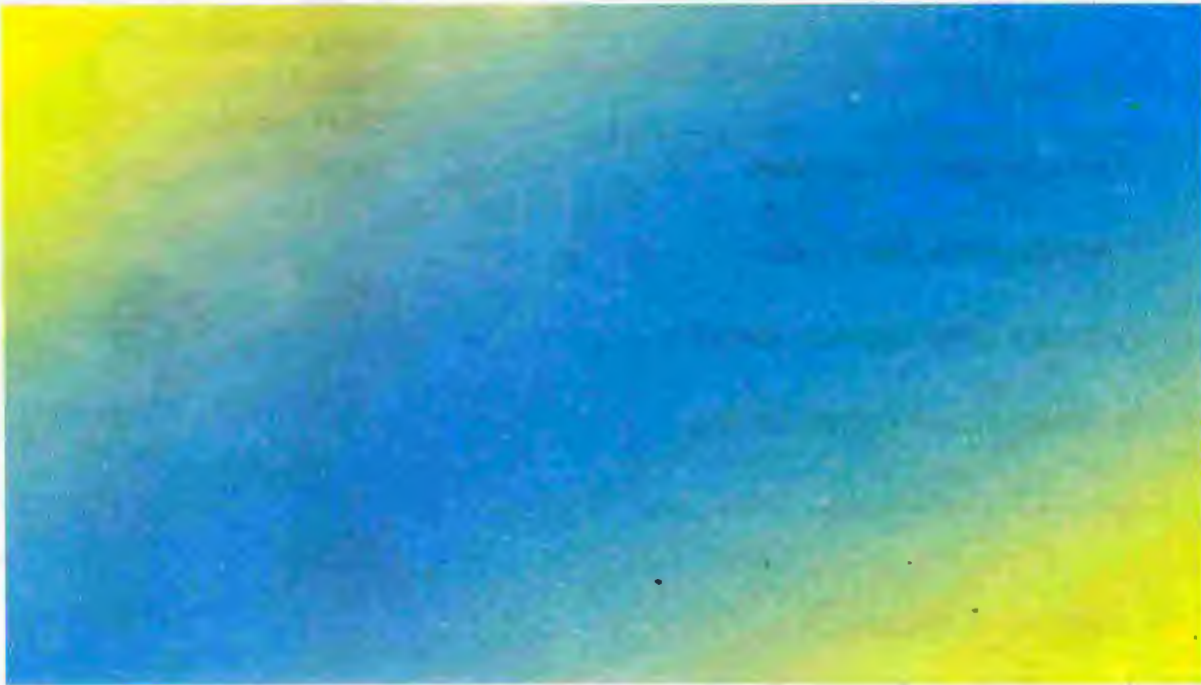
⊕ Names of some of the months are missing in the list given below. Fill the names of those months.

January, February, _____, April, _____,

June, _____, August, September, October,

_____, December.

⊕ Look at the calendar to find out

a) Which is the first month of the year? _____

b) Which month comes after March? _____

c) Which month comes before August? _____

d) Which is the last month of the year? _____

February is Different

4 months have thirty days.

7 months have thirty-one.

February is the shortest month.

In some years it jumps for fun.

Long months have 31 days, short months have 30 days.

Look at the calendar to find out:

- Which months have 30 days?
  _____
- How many months have 31days? _____
- How many days are there in February? _____
- How many days together are there in May and June?
  _____
- How many Sundays are there in July? _____
- What is the day on your birthday? _____

Find Out

How many days do you get for your summer holidays?

_____

How may winter holidays do you have? _____

The picture shows a popular way to remember long and short months. Starting with January, the long months sit on the knuckles, while short months are in the spaces between.

Blow Hot, Blow Cold

I am Ashraf. I live in Kashmir. Most of the time here the wind is very cold. It makes my teeth chatter. I like to sit in the sun or near a fire

I am Lakshmi. I live in Chennai. These days the sun is too hot. My feet burn if I walk barefoot. I like to sit in a pool.

I am Rubaiya. I am in Meghalaya.
Here the rains just don't stop.
The sun is hiding behind dark clouds

Encourage children to share their own experiences about different seasons.

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1] Have you ever felt –

a) Your teeth chattering with cold?   Yes/No

b) Your feet burning on walking barefoot?   Yes/No

c) Name one month when you can easily walk
   barefoot. _____

2] a) Have you seen it raining for many days?   Yes/No
   b) In which month does it rain the most in your area?

   _____

3] a) Which are the hottest months in your area?

   _____

   b) Which are the coldest months in your area?

4] Which fruits and vegetables are seen a lot in the
   market in these months? Write or draw:

May- June		December- January	
Fruits	Vegetables	Fruits	Vegetables

Chapter 6

Jugs and Mugs

Make and Enjoy Lemon Drink
You will need

A pinch of salt

One spoon of sugar

Half a lemon

One glass of water

How to make it:

Guess and then find out:
How many drops of lemon juice do you get from
half a lemon? _____
How many drops of lemon do you get from
a full lemon? _____

How many drops of lemon juice fill one
spoon? _____

Enjoy your lemon drink!

To make a drink, locally available material can be used or the name of the drink can also be substituted. The focus should be on volume.

For making 6 glasses of lemon drink –

How many lemons will you need? _____

How many spoons of sugar will you take? _____

Lemon Drink Stall at a Village Fair

There is a fair at Gulshan's village. Gulshan, Aamir and

Wasif want to put up a stall to sell lemon drinks. They

make a ⬛ bucket full of lemon drink.

They used two ⬛ different sizes of glasses.

Gulshan got a (jug) jug.

Do you think it is easier to pour into a (glass) glass from

a (jug) jug than (bucket) bucket?

Aamir found out that two (glass) big glasses fill the (jug) jug.

Shabnum wants to buy one (jug) jug full of lemon drink.

How much does she need to pay? _____

Gulshan found that two (glass) small glasses fill one (glass) big glass.

How many (glass) small glasses will fill the (jug) jug?

Fun in Filling Vessels

Find out how many (cup) cups of water will fill your (bottle) bottle.

First guess and try to find out.

Now fill a different (bottle) bottle with the same cup,

Which holds less water?

Try it with another (bottle) bottle

Which holds the least water?

68

Salma and Navinder brought different **vessels** from the kitchen. They had a ⚱ jug, a 🥛 glass, a ☕ mug, a 🥛 pot and a 🥣 bowl.

They filled each of these with a 🍵 cup.

Guess which vessel holds the least water. _____

Which vessel holds the most water? _____

Now, you collect different vessels from your kitchen.

Use the same 🍵 cup to fill each of them.

Count the number of cups of water each of them can hold.

First guess and then do it.

The vessel you used	Cups of water to fill it
🥣	

Ring the one which holds the more water.

(a)

(b)

(c)

"Capacity"

Look at the vessels given below. Can you tell what they are used for?

These vessels are used to collect water, milk, oil etc.
These can also be used for some other purposes. Can you name other purposes?

Which bucket can hold more water?
Obviously, the second bucket.

Which of the two, bottle or jar,
may hold more water?

Some of you may say the bottle.
Some of you may say the jar.

How can we decide?
Let us fill both these vessels
with water, using a tumbler.

A girl is filling a bottle with water, using a tumbler.

A boy is filling a jar with water, using a tumbler.

3 tumblers of water fill the bottle.
4 tumblers of water fill up the jar.
Hence, the jar can hold more water.

In the above experiment, we say that the capacity of the bottle is 3 Tumblers and the capacity of the jar is 4 tumblers.

Activity Time

1. Measure the capacity of
[a] a jar in terms of a mug.

[b] a drum in terms of a bucket.
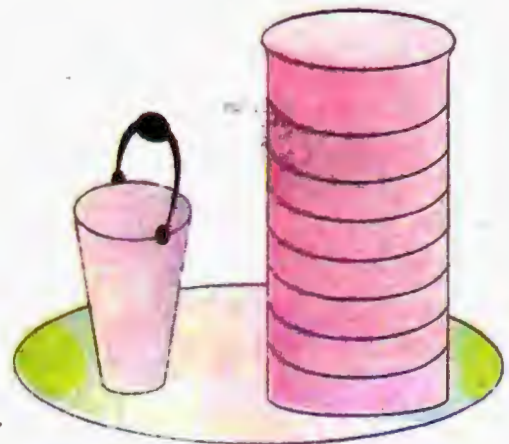
[c] a mug in terms of a cup.
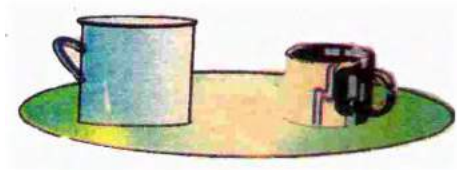
[d] a bucket in terms of a glass.
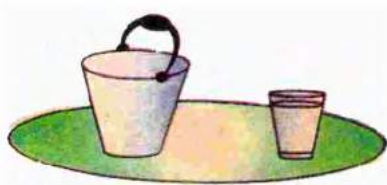
2. Estimate and then verify by actual measuring.

[a] How many cups will fill up a mug?
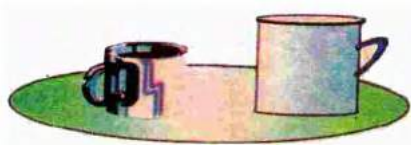
[b] How many cups will fill up a jar?
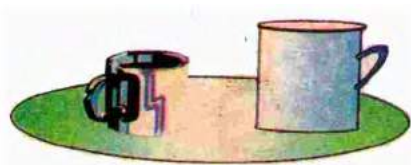
[c] How many cups will fill up a glass?
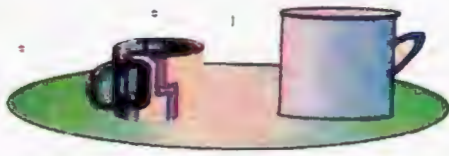
Arrange the three objects- the mug, the jar and the glass- in order of capacity.

3. How many [a] mugs, [b] glasses, [c] jars, will fill up a bucket?

4. Use a cup to estimate the capacity of your water bottle.
    Verify it by actual measurement.

5. Fill in the blanks:

[a] If a jar is filled completely with 16 cups of water, then the capacity of the jar is _____.

[b] If a bucket is filled completely with 10 jars of water, then the capacity of the bucket is _____.

[c] If 8 glasses of milk fill a vessel completely, then the capacity of the vessel is _____.

6. Answer the following questions:

[a] When the capacity of a jar is 6 cups, what does it mean?

_____

_____

[b] When the capacity of a bucket is 8 jars, what does it mean?

_____

_____

Iqra and the Milkman

Aslam is a milkman. He gives the same amount of milk at

Iqra's house everyday. He uses [mug] a mug three times to

fill Iqra's milk pot [pot]

One day Iqra's mother gave her a different [pot] pot to take milk.

Everyday Iqra's [pot] pot would fill to the top. But today Iqra found

that the [pot] pot was not filled completely.

Do you think Aslam has given Iqra less milk? Help her.

Find out

How much milk does your mother buy everyday? _____

76

Try Yourself
Take five different types of big vessels from your kitchen.
Fill all of them one by one with one jug full of water.
What do you see? Why?
Talk to your friends about it.

Thirsty Crow

Chirpy crow was very thirsty. It looked everywhere but

could not find water. Suddenly it saw a ⬭ pitcher [*matka*].

When it tried to drink water, it found there was very little

water in the ⬭ pitcher.

It saw 🔵 pebbles lying nearby.

I have an idea!

It put the 🔵 pebbles into the ⬭ pitcher one by one.

The water came up ⬭

Chirpy drank water and flew away.

Do you want to Be Like Chirpy?

Do you want to know how the water in the ⬤ pitcher came up?

Take two 🥛🥛 glasses of the same size.

Fill half of each glass with water.

You have to put tamarind (imli) seeds in the first glass to raise the water to the top. Guess how many seeds you will need to put in.

Now, do it.

Count the number of seeds used. _____

Now put the same number of marbles in the second glass.

What happens?

Repeat it with stones.

What happens now? Why?

Talk about it in the class.

Water is Useful

Find out how much water (in mugs or buckets) is used in your house for each of the following.

_____   _____

_____   _____

Guess and then find out:

A] How many mugs of water fill one bucket?

_____

B] How many buckets of water do you use to take a bath? _____

C] How many mugs of water do you use to take a bath?

_____

How much water is needed to fill a water gun (pichkari)?

I can drink 9 buckets of water at once. How many buckets can two camels drink at once?

How much water will fill a balloon?

_____

Chapter 7

Add Our Points
Toss the Ball

Animals of the forest are playing. Turn by turn, they toss the ball on their bats until it falls. Each player gets two turns and Bunnoo rabbit adds their points. But do you know how he adds?

You tossed the ball 14 times.

Only 7 tosses this time.

I have one more

Bunnoo adds on the snake. To add 14 and 7, Bunnoo stands on 14. He jumps 7 steps forward. He reaches 21.

You can also add points on the snake.

81

$16 + 7 =$ ☐

$18 + 10 =$ ☐

$19 + 15 =$ ☐

$49 + 13 =$ ☐

$14 + 7 =$ ☐

$33 + 11 =$ ☐
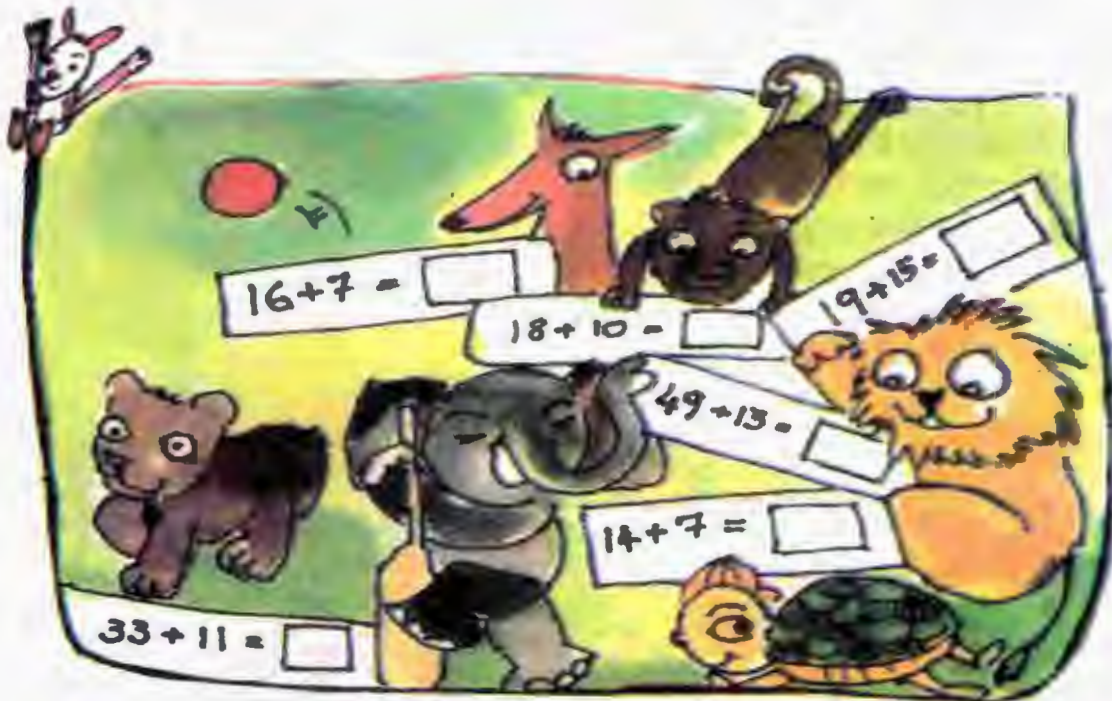
⊕ Who won the game? _____
⊕ Who lost the game? _____
The winner got bananas from Bunnoo.

Guess and Tell

Fatima is going to her grandmother, who lives in the next village. She wants to take 15 kg sugar cane, 7 kg apples and 8 kg tomatoes.
She has to cross a river. In the boat she can take 25 kg weight. Can she carry all the things?
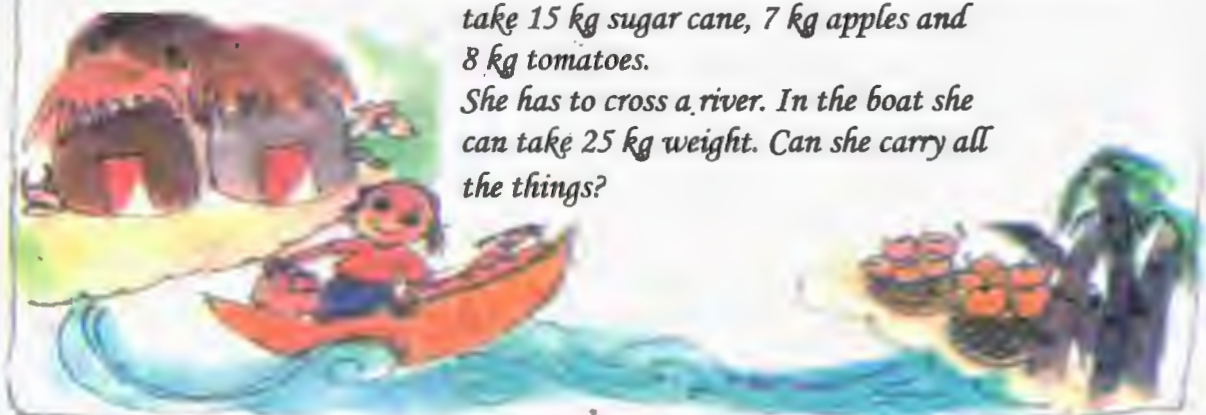
This time the Kangaroo, chimp, deer, giraffe and tiger came to play. But the tiger lost the game. He rubbed off some points in anger.

☞ Write the missing points.

☞ Who is the winner this time?

_____

$16 + \boxed{} = 21$

$\boxed{} + 8 = 32$

$16 + 13 = \boxed{}$

$\boxed{} + 5 = 35$

$23 + \boxed{} = 30$

Heads and Tails

Have you seen the two sides of a rupee coin?   **Heads   Tails**
Which side has 1 written on it? Heads/Tails
Sameena and Sadiq are playing. The board has numbers from 1 to 99. Each player
has a button.

They tossed a coin. If it is ⚫ 'Heads', the button moves 10 steps. So, if Sameena

is on 6, she moves to 16. if she gets ⚫ 'Tails', she moves only one step.

91	92	93	94	95	96	97	98	99	
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

Start

Now you play this game. The one who reaches home first, wins the game. Is there
a shortcut for 10 steps?

Two at a Time

Chunni and Munni went shopping. They bought some things. To pay they used notes and coins, but only two at a time.

⊕ Out of these, which two can they use to buy the things below? They can use the same note or coin more than one time.

Rs 20

Rs 10

Rs 10   Rs 10

Rs 60

Rs 10

Rs 40

Rs 25

85
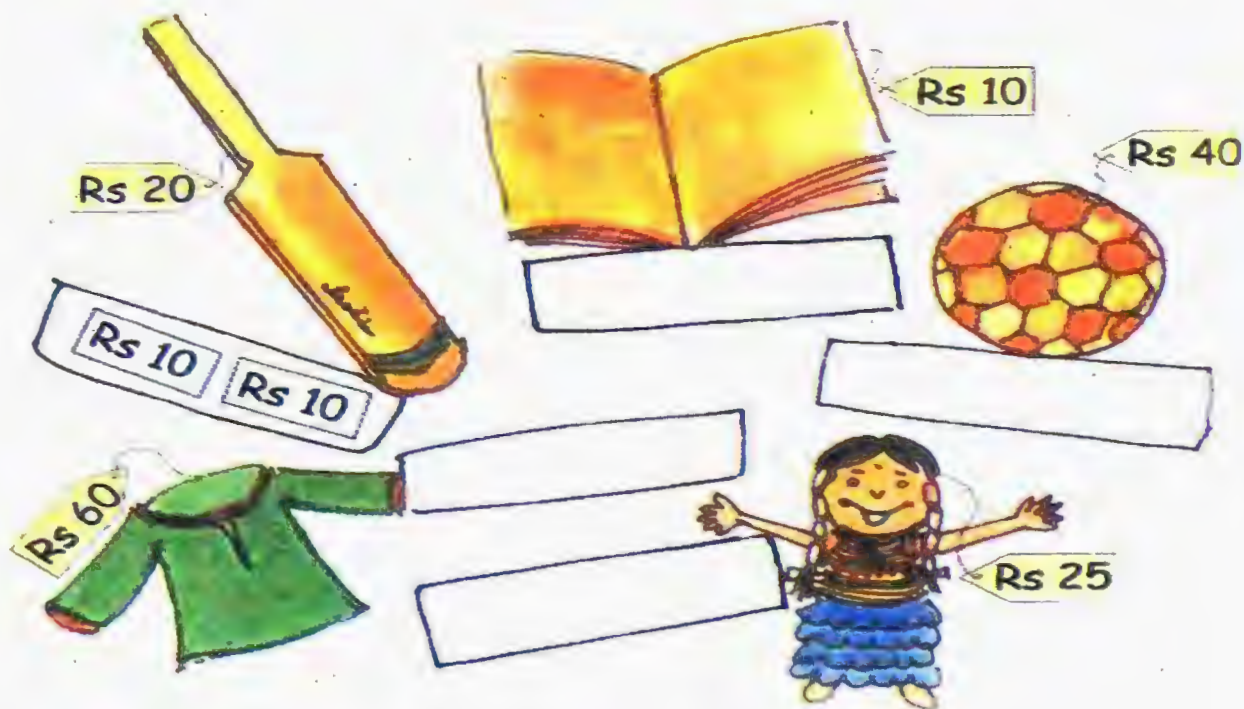
How Fast Can You Add?

Ali, what are you doing?

$7 + 5 + 3 = ?$

$7 + 5 + 3 = ?$

Baji, please help me add.

Oh… you can add these without writing

Start from 7 and count 5 more to make 12. Then add 3 more. You get 15

$7 + 5 + 3$

Or $12 + 13 = 15$

86

I can also add 7 and 3 first to get 10. And then add 5

Then
$7 + 5 + 3$

Or $10 + 5 = 15$

Now Let's Do These

$5 + 5 + 7 = \boxed{}$

$6 + 5 + 4 = \boxed{}$

$9 + 4 + 1 = \boxed{}$

$7 + 3 + 8 = \boxed{}$

$8 + 3 + 2 = \boxed{}$

Let children do these sums by adding mentally. If some are not yet able to do so, encourage them to use the snake or the hundred chart. They can also be helped to find different combinations in order add fast.

A lizard moves from one hole to another .As it moves, it eats insects hidden in each hole.
The number of insects in each hole is shown.
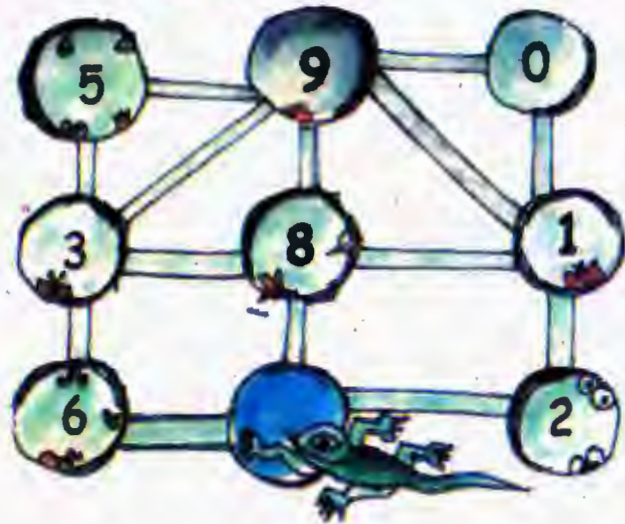
The lizard can move only along the lines.

Starting from the blue hole in the picture, the lizard goes to three holes to eat 18 insects.

This is the path the lizard takes –

(8) + (1) + (9) = 18

⊕ What path can the lizard take to eat 12 insects?

◯ + ◯ + ◯ = 12

⊕ What path can the lizard take to eat 20 insects?

◯ + ◯ + ◯ = 20

This time the lizard goes to four holes to eat insects?

⊕ What path does the lizard take to eat 18 insects?

◯ + ◯ + ◯ + ◯ = 18

⊕ What path does the lizard take for 12 insects?

◯ + ◯ + ◯ + ◯ = 12

Play Time

Sameena and Sadiq are now playing another game on the board of Heads and Tails. They throw dice and add the numbers to get their points.

You can too play this game. Throw your dice and write your points. See who is the first to reach home.

How many points are these?

	Begin at	Points on dice
Throw 1	Start	_____
Throw 2	_____	_____
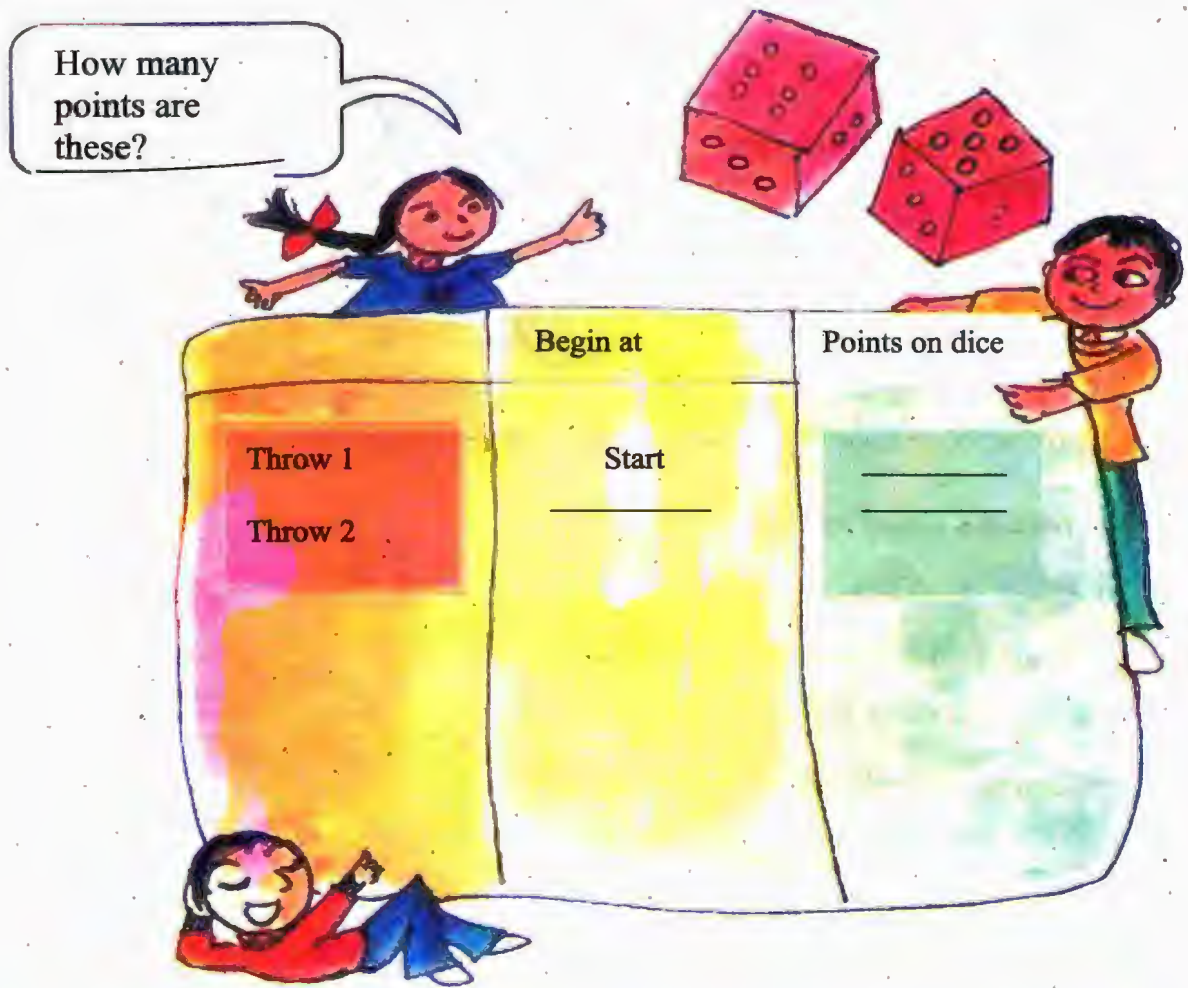
This record could help children check their moves. For instance, they could see that, starting from one number in the left column, they get to the next by adding the points in the right column. Use the board on page 84

Chapter 8

Lines and Lines

Whose Line Is It?

Today, there is a cricket match in Fatima's school. Fatima, Bunty and Saima have each brought their own stump from home.

They keep these in a corner of the room.

Fatima keeps her stump in **standing** position.

Bunty keeps his stump in **slanting** position.

Saima keeps her stump in **sleeping** position.

To show others how they have kept their stumps, they draw lines in a notebook.

Fatima draws a standing line.

Bunty draw a slanting line.

Saima draws a sleeping line.

Match the picture of each child with the correct line.

90

Here are some **standing** lines, **slanting** lines and **sleeping** lines. Now draw some more such lines
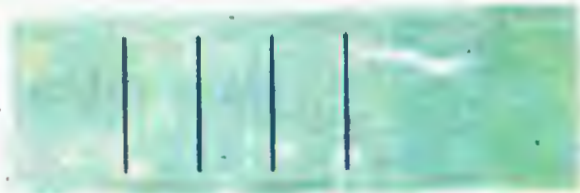
I can draw lines with the side of my pencil box.

I can draw lines with a scale.

I will try to draw lines with only my hand

Dolma's lines are not straight. These are **curved**.
Draw more **curved** lines by joining the dots.
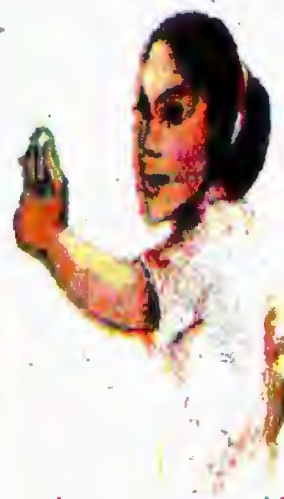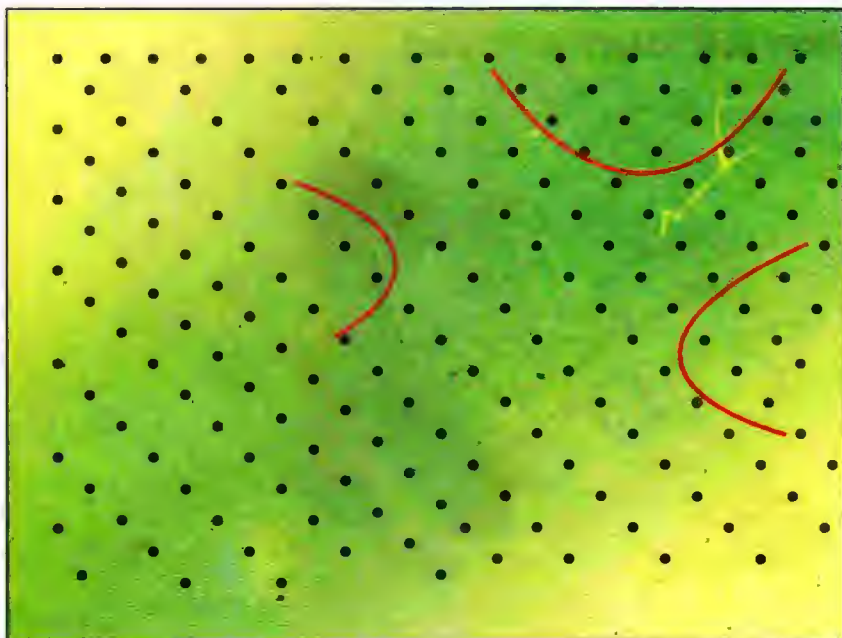
Dolma

Fun with lines

Aasiya has a clock. She can read the time written in numbers and also the day of the week. The numbers and letters are made with straight lines.

Aasiya made more numbers and letters with used matchsticks.

Come make some more

⊕ Collect used matchsticks. Have fun making numbers and letters with these.

⊕ Is there any number or letter that you cannot make with matchstick?

⊕ Now write some numbers using straight lines.

⊕ What about writing letters using straight lines? Which ones are easy?

⊕ Find out where else numbers and letters are written with straight lines.

Play Time:

Take a sheet of paper. Fold one side onto the opposite side.
Press it to get a crease. Unfold it. The crease gives an idea of a line.

Step 1   **Step 2**   **Step 3**
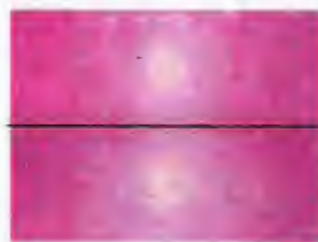
Step 1   **Step 2**   **Step 3**

A wall and the floor of a room meet in a line

When we move a pencil along an edge of a book, we get a line.

Holding a string tightly, we get a line.

Horizontal Lines
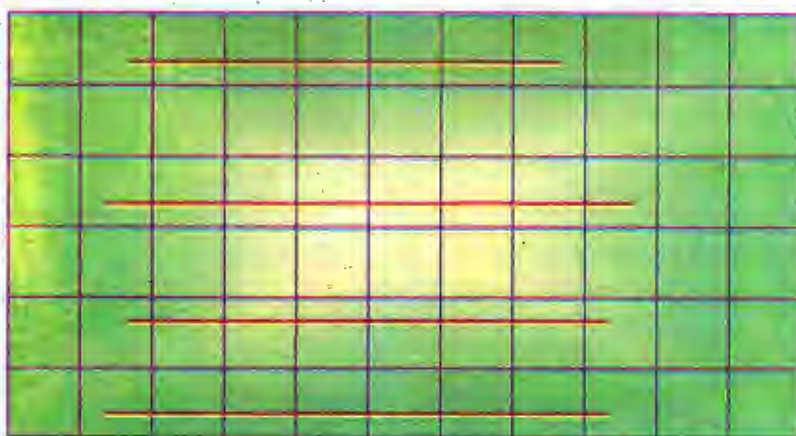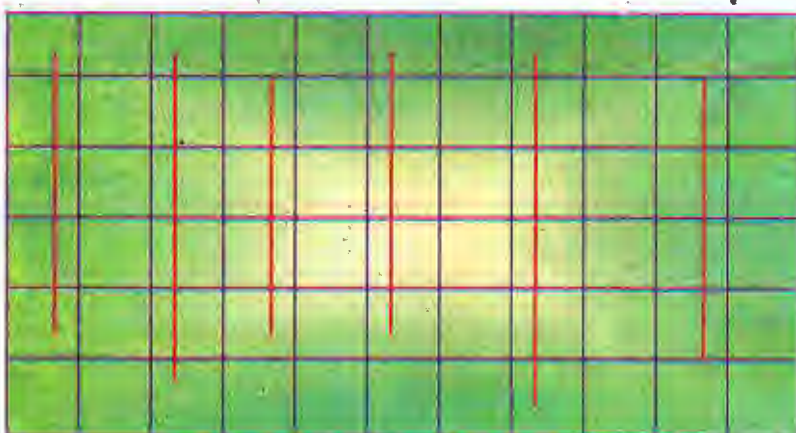
Vertical Lines
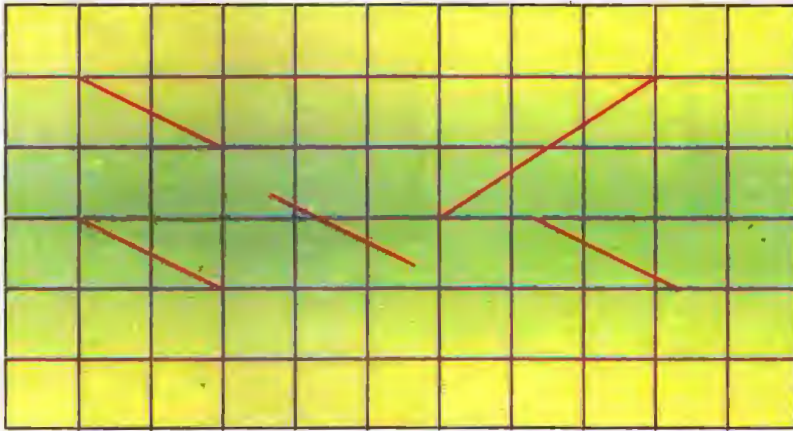
Slant Lines

Let us learn to draw a line

Activity

1. Count and write the number of:

Horizontal lines [ ]   Vertical lines [ ]
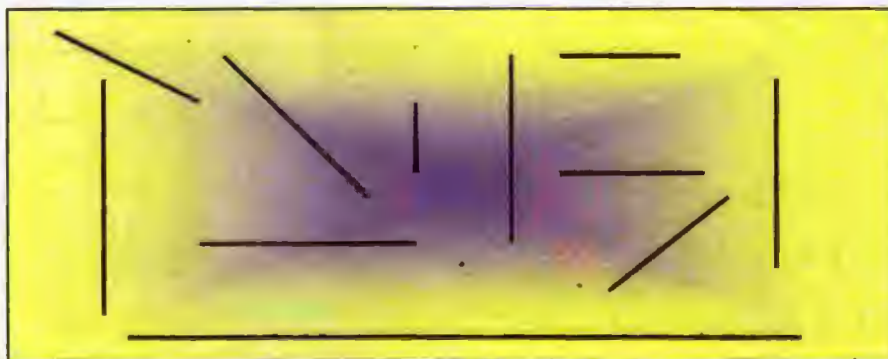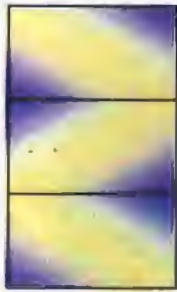
Slant lines [ ]

2. Write the number of:

Horizontal lines

Vertical lines
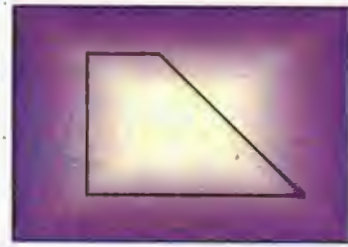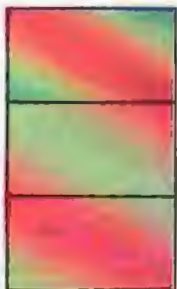
Slant lines

3. Write the number of:

Horizontal lines

Vertical lines
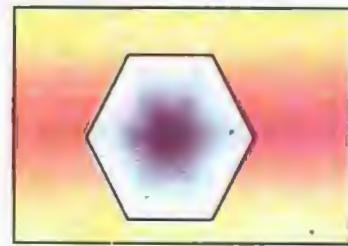
Slant lines

5. On a squared paper, draw

2	Horizontal lines
3	Vertical lines
4	Slant lines
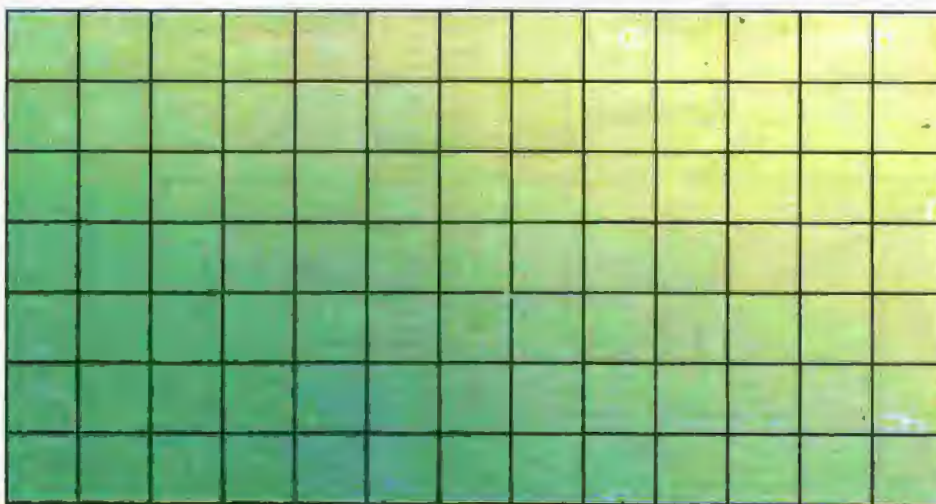
6. In the blank space given below,
   draw a few lines using a ruler

7. Using your notebook, draw a horizontal
   and a vertical line, in the blank space given below
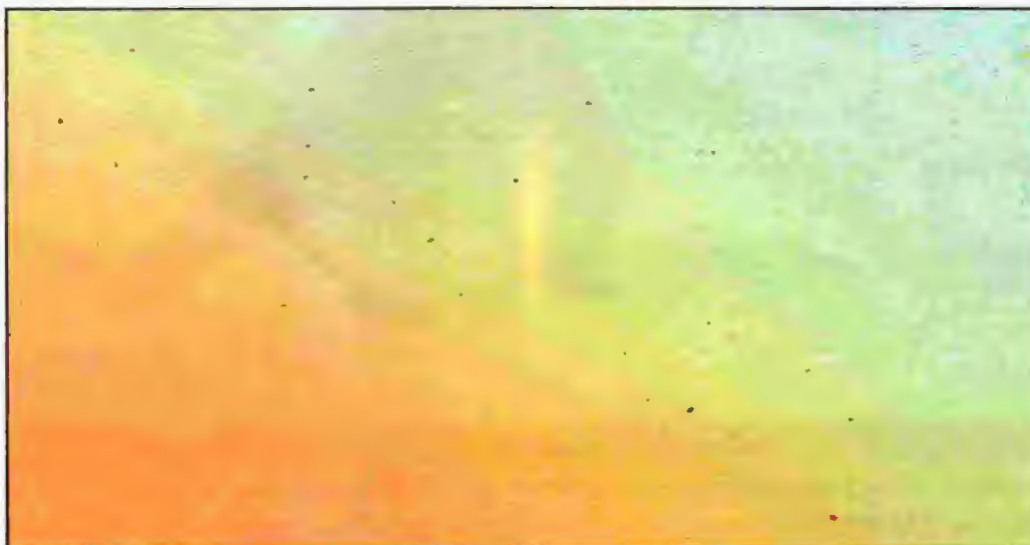
Dancing lines

Seema saw a traffic policeman giving directions to vehicles.

⊕ Does a traffic policeman sometimes make curved lines? _____

Seema tried to act like a traffic policeman. She made many straight and curved lines. It was fun. It looked like dance.

Try the dance steps given below and enjoy like Seema.

Several classical dance forms such as Bharatanatyam and Odissi use geometrical movements. Children can be encouraged to look for different lines or shapes in pictures or T.V. programmed.

Designs with Dots

⊕ Join the dots with curved or straight line.
Make your own designs.
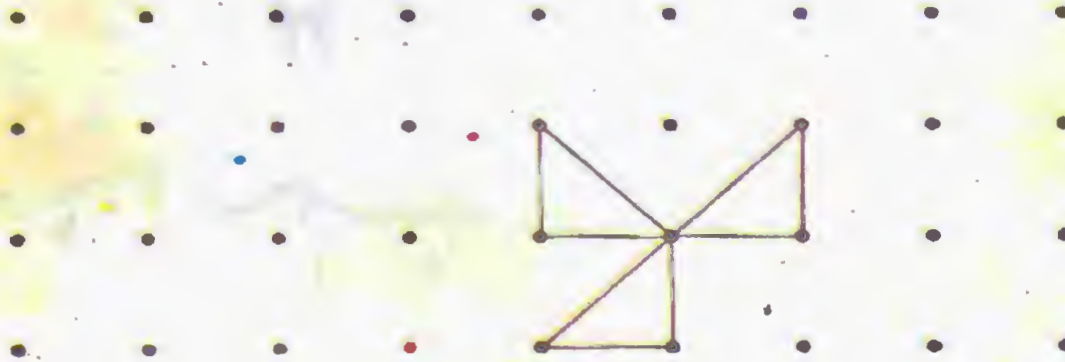
Lines in Picture

Asma saw these pictures made by folk artists.

⊕ Look for different types of lines – curved, standing,
     Slanting and sleeping.

⊕ Draw some more pictures like these.

Chapter 9

Give and Take

Rukaiya sells ·•• beads in the bazaar.

She sells loose ·•• beads and ◌ necklaces of 10 beads each.
Razia wants 12 beads. So Rukaiya gives

her one ◌ necklace and two •• loose beads.
Now find how many necklaces and loose beads the other children take.

	Beads	Necklace Of 10 beads	Loose beads
Razia	12	◌	••
Seema	17		
Aasif	24		
Babloo	35		
Sameer	31		

How many beads are taken by Razia and Seema together?

Encourage children to make groups of 10 using materials like beads, matchsticks, button etc. These concrete experiences will help develop their understanding.

Razia

Seema

Uhm — h! Razia has one necklace, and two beads. Seema has one necklace and seven beads.

Right! You can write it

First let us take all the loose beads together and count.

1	2
1	7

+

1	2
1	7
	9

+

There are 9 loose beads. So I write 9 in this box.

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1	2
1	7
2	9

+

Now take all the necklaces together and count

There are 2 necklaces. So I write 2 in this box.

I got it! Razia and Seema have 2 necklaces and 9 beads in all.

That is right! Razia and Seema have 29 beads in all.

Practice Time

⊕ How many beads are taken by Razia and Seema?

Razia

+

1	2
3	

Babloo

_____ beads are taken by Razia and Babloo.

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One Extra Necklace

Beads taken by Seema and Aasif –

Seema

Aasif

$+$

1	7
2	4

Right! Now add them

Seema has 17 beads. Aasif has 24.

I must first count all the loose beads together.

There are 11 loose beads. What do I write in the blue box?

$+$

1	7
2	4

10 loose beads make one necklace. Right? So add 1 more to the necklaces.

I write a small 1 to remember one extra necklace

^{1} 1	7
2	4
	1

Ah! Seema and Aasif have 4 necklaces and 1 bead in all.

Yes, Seema and Aasif have 41 beads in all

I can do it very fast in another way. Simple! If Aasif gives 3 to Seema. Seema will have 20. Aasif will have 21. So $20 + 21 = 41$.

Can you do it some other way?

Add by writing and also without writing

How many beads do they have together?

A)

Keema	1	7
Bablo +	3	5

_____ beads

B)

Aasif	2	4
Razia +	1	2

_____ beads

How many more Beads?

A)

Babloo	3	5
Aasif −	2	4

Babloo has _____ more beads than Aasif.

B)

Aasif	2	4
Razia −	1	2

Aasif has _____ beads than Razia.

C) How many more beads does Sameer have than Seema?

Sameer

Seema

3	1
1	7

How will you take 7 beads away from 1 bead?

Sameer has 31 beads. Seema has 17 beads.

Open 1 necklace of Sameer

Ah! So, Sameer has 2 necklaces and 11 beads.

To remember, I will cross 3 and write a small 2 in the necklace box.

2 3	1 1
1	7

109

Now it is easy. You can take away 7 beads from 11

Sameer

Seema
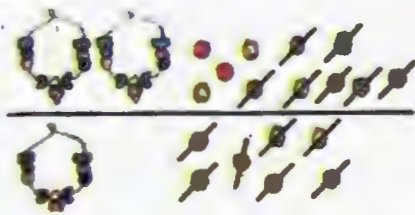
²3	¹1
1	7
	4

Yes! I have written4 in the box.
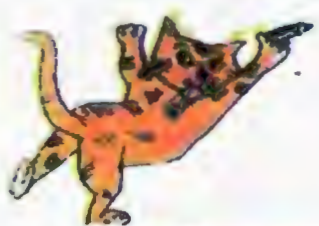
That was quick! Now take away 1 necklace from 2 necklaces.

²3	¹1
1	7
1	4

I have written 1 in the necklace box.

Sameer has 1 necklace and 4 beads more than Seema.

Ah! Sameer has 14 beads more than Seema.

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Practice Time: Also do it in your mind

✛ Ayesha has 17 pencils. Riya has 25 pencils. How
   many pencils are there in all?

Ayesha

1	7
2	5

Riya +

If Riya gives 3 pencils,
then Ayesha will have
20 pencils. Riya will
have 22 pencils. It is
easy to add 20 + 22.

1	3
2	2

✛ In Muneeza's class, there are 13
   English story books and 22 Urdu
   story books. How many story books
   are there in all?

   +

✛ Uzma had 23 fruits.
   She ate 15 fruits.
   How many are left?

   -

2	3
1	5

✛ Sonu has 35 marbles.
   Raju has 25 marbles.
   How many marbles
   do they have in all?

   +

3	5
2	5

✛ Ishrat has 32 bangles.
   Suraiya has 16 bangles.
   How many more bangles
   does Ishrat have?

   -

3	2
1	6

Aslam's Canteen

Help Aslam
to make the bills.

	Rupees
Chola Poori	2 3
Ras Malayee	2 8
Total	

	Rupees
Butter Toast	1 5
Coffee	8
Total	

	Rupees
Dal fry	2 5
Rice	1 8
Total	

	Rupees
Soup	2 7
Noodles	1 5
Total	

In this chapter, the standard algorithms for addition and subtraction have been explained using some examples. However, it should be emphasized that learning only algorithms does not help to develop children's conceptual understanding of the operations. For this, it is important to give them many word problems and encourage them to find out alternative ways to solve them.

It's Time to Buy!
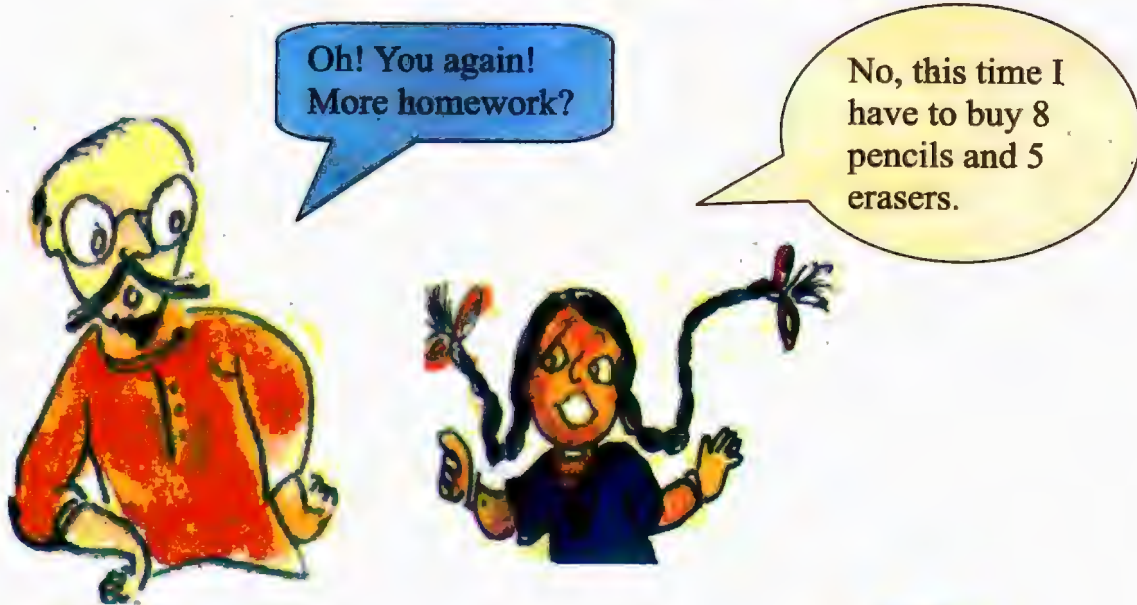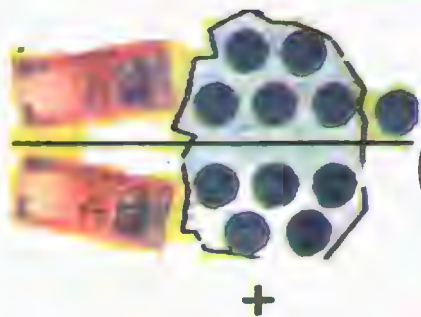
I have to pay
31 rupees, but
I have Rs 40.

So, find out how
much money
you get back.

4	0
- 3	1

I will get back _____ rupees

Children should draw and make their own play money. They could be given
different exercises and games which involve simple calculations.

Practice Time

Abbas has 32 rupees. He bought a ball for 17 rupees.
How much money is left with him?

3	2
1	7

−

> I have a shortcut. If I take away 2 coins from 32 and 2 coins from 17, I will be left with 30 − 15.

Salma bought biscuits for 24 rupees and a packet of chips for 16 rupees. How much money will she pay?

2	4
1	6

+

> Try doing it without writing!

Ali had 64 rupees. He spent 39 rupees at the fair.
How much money is left with him?

6	4
3	9

−

> Also find a way to do this without writing.

Now Let's Do These.

1. Find the sum. Use the short form:

	4	7
+		7

	1	5
+	1	5

	2	0
	2	5

	4	4
+	3	8

	1	4
	2	0

	4	7
	2	3

	3	6
+		6

	1	7
	1	1
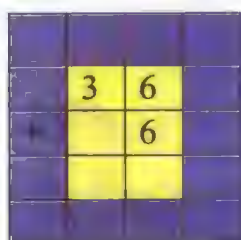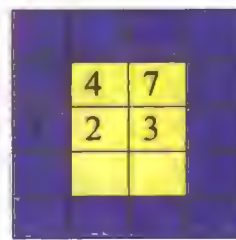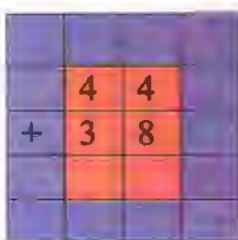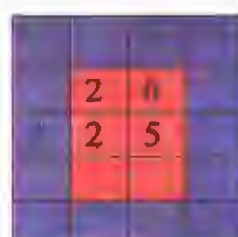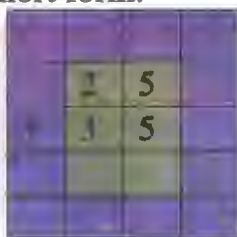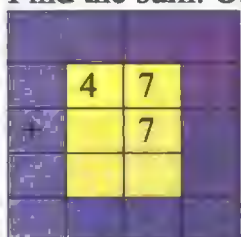
2. Write the two numbers in column on a squared paper. Add the two numbers.

37 and 48   27 and 49   67 and 15   46 and 34

	3	7
	4	8
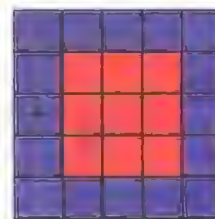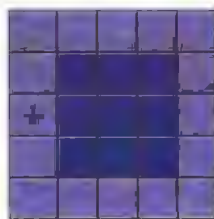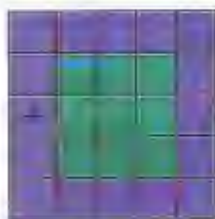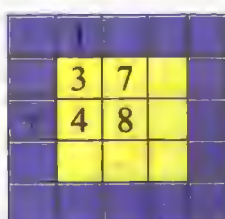
65 and 26   29 and 28   18 and 15   65 and 26
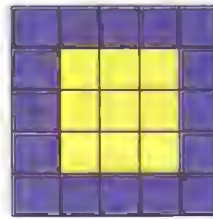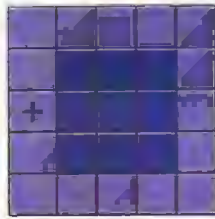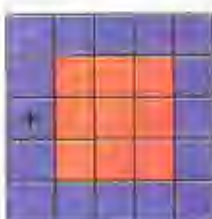
Find the sum

1	6	
1	7	
− 1	5	

1	6	
1	7	
+ 1	5	
4	8	

	2	8
+	1	7
+	3	9
=		

	1	7
	1	9
+	2	8

	5	0
+	1	7
+	2	9

	2	9
+	2	9
+	1	9

	6	4
	1	7
	1	6

	3	7
+	2	8
+	1	5

	6	6
+	1	6
+		8

	5	9
	1	9
	1	9

	6	5
+	3	4
+	3	5

	2	8
+	6	5
+	6	3

	9	9
+	0	6
+	8	4

Write the numbers in column on a squared paper and add:
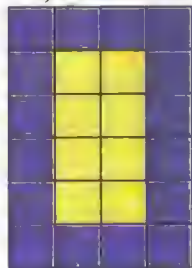
37, 32 and 7   14, 8 and 73   5, 50 and 15   14, 37 and 18
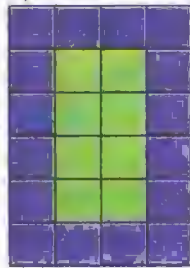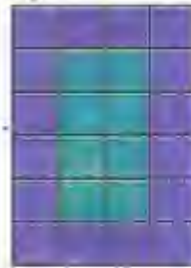
16, 26 and 39   20,9 and 39   33, 44 and 15   5, 26 and37
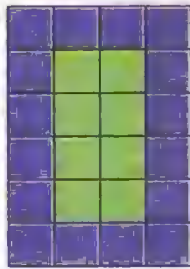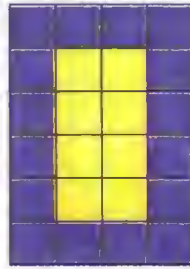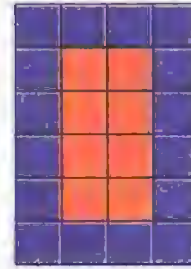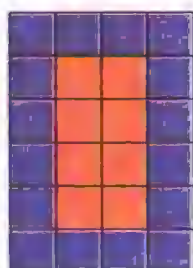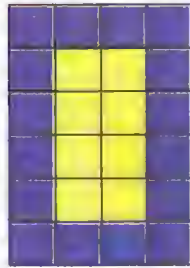
20, 9 and 37   46, 35 and 7   47, 2 and 33   44, 17 and 9
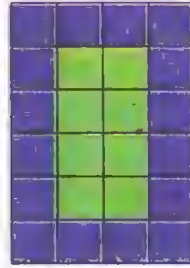
28, 14 and 2   15, 15 and 15   39, 31 and 17   55, 4 and 16
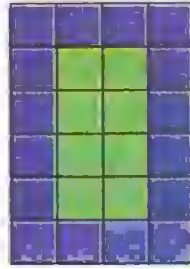
119
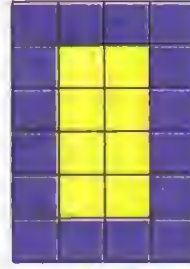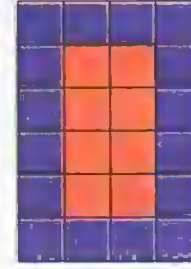
Find the difference

8	9	
− 5	3	

= →

8	9
− 5	3
3	6

4	7	
− 1	2	

= →

4	7
− 1	2

9	6
− 6	0

5	7
− 3	6

6	6
− 2	2

9	3
− 5	1

9	9
− 6	6

4	5
− 2	2

7	6
− 4	2

8	4
− 3	1

5	5
− 2	3

8	6
− 3	4

5	5
− 4	1

8	7
− 1	3

7	9
− 2	7

9	9
− 4	4

7	3
− 5	1

6	8
− 3	4

120

8	9
- 5	3

8	7
- 2	3

4	7
- 1	2

4	7
- 3	3

4	9
-3	6

9	2
- 6	0

5	7
- 3	6

6	6
- 2	2

9	3
- 5	1

9	7
- 4	3

1. Arrange the given two numbers in columns. Then find their difference.

45 and 32   59 and 30   47 and 89   36 and 20   32 and 45

50 and 40   78 and 89   48 and 24   17 and 88   20 and 45

99 and 36   78 and 68   53 and 41   48 and 27   43 and 32

Chapter 10

The Longest Step

Three friends – a rabbit, an elephant and a deer – were playing together in a park.

But both of you run fast and I move slowly. I know that one of you would cross the bridge first. I don't want to play the game.

Let us see who crosses the stone bridge first!

Don't worry. Let's make a rule – we will not run we will walk.

Yes, it will be fun
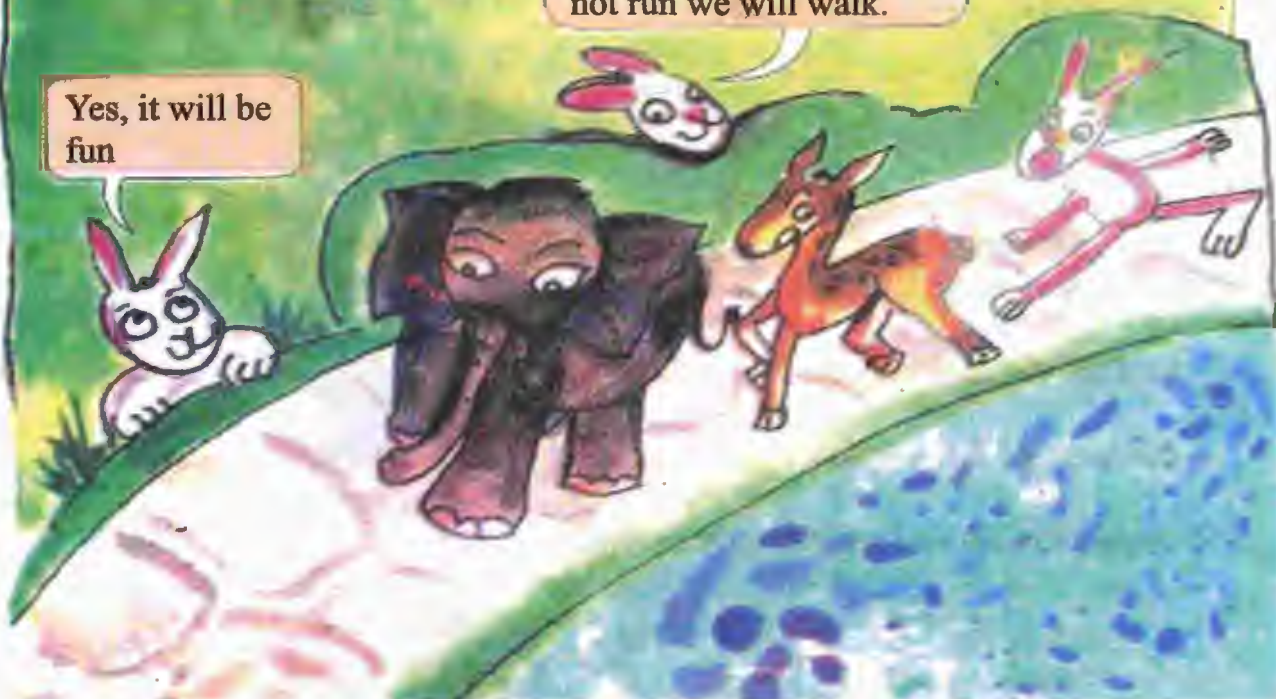
They started the game.
Surprisingly, at the end, the elephant won.
🔟 Can you tell why the elephant won?
🔟 Who takes the biggest steps?
🔟 Act out this story.

Activity Time

I sit here. I will find out how far my friend is sitting.

⊕ Make a group of 3 – 4 friends. Find out by drawing lines whose step is the longest?

⊕ Find the distance between

a] the door and any window of your class

b] the blackboard and where you are sitting.

Hand or Fingers?

Burhan wants to find out the
length of a few things using his
handspan. These are shown in the picture.

⊕ Can he use a handspan to
   find the length of all these?
⊕ Which things around you are less
   than your handspan? Name them.
⊕ What would you use to find the length of those things?

Activity

Make a mud house. See
whose mud house is
higher. You can use your
fingers to find how high
your mud house is.

⊕ Who made the highest
   mud house?
⊕ Whose mud house is the smallest?

Make a Guess

See these two coconut trees. If the
bigger tree is 6 metres high, about
how high is the smaller tree?

Check Your Guess

Guess the length or the height of the things shown below. Find the length to check your answer.

How long is teacher's plait?
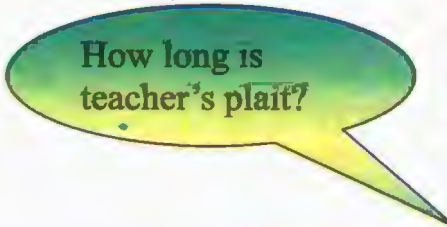
Name of the thing	My guess	My result
Glass	_____fingers	_____fingers
Bucket	_____handspans	_____handspans
Your hand	_____matchsticks	_____matchsticks
Teacher's table	_____handspans	_____handspans
Your nose	_____fingers	_____fingers
Water bottle	_____fingers	_____fingers
Your hair	_____handspans	_____handspan

Cat's Food – Rat or Milk?
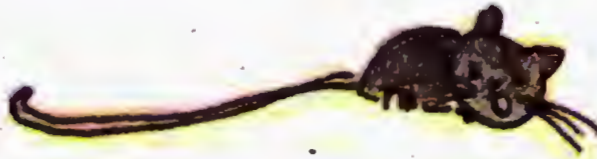
- ⊕ Use your fingers to find out the distance between the rat and the milk. _____ fingers

- ⊕ How far is the cat from the rat? _____ fingers

- ⊕ How far is the cat from the milk? _____ fingers

- ⊕ What will the cat reach first – the rat or the milk?

- ⊕ Can the rat save itself? How?

- ⊕ Tell a story using this picture.

- ⊕ How long is the rats tail? _____ fingers

- ⊕ Who has longer ⁓ whiskers? The rat or the cat?

Measure and Draw
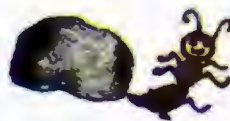
⊕ Draw a leaf 2 finger away from the stone.

⊕ Draw a banana 5 matchstick away from the monkey.

⊕ Draw a kite 7 finger away from the stone.

⊕ Draw a cloud 3 matchsticks away from the kite.

⊕ Draw a bird 4 finger away from the banana.

Draw yourself anywhere on the page. Find how far you are from the monkey's nose.

Let children measure and draw in any direction from the given reference object. They will measure distances in different directions. This can form the basis for a discussion on directions.

Is That So?

Shazia and her friends were trying to find out the length of their different body parts. Here is what they found out —

My face is about one handspan long.

My arm is not as long as my leg.

My forehead is about four fingers wide.

A] Do you agree with what they said?

B] Check how many of your friends have __

    1] a face one handspan long   _____

    2] the arm as long as the leg   _____

    3] a forehead 4 fingers wide   _____

C] You can try and measure other parts with your fingers and write their length.

    1] Your nose is _____ fingers long.

    2] Your ear is _____ fingers long.

The estimates of the body proportions given here are rough. This exercise is only to carry out measurements using body parts, and not to make any general claims about body proportions.

Chapter 11

Birds come, Birds Go

Let us count them using our cards.
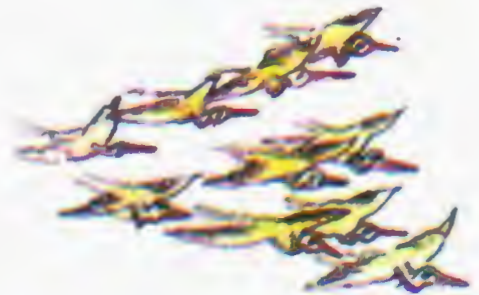
Uhm---m!

One **10** card for this whole group!
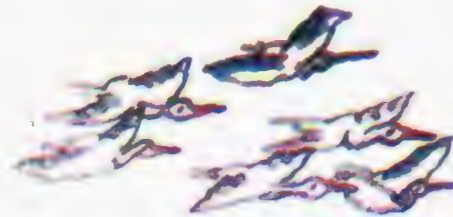
And six **1** cards for this group of bird.

So, these cards show 16 birds.
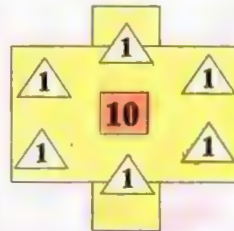
But where did they all come from?

This could be a good chance to initiate a discussion about migrating birds coming from far-off places. Also encourage and help children to recognize patterns in which different birds fly.

130

Soon 25 more birds flew in. let us add to see how many birds in all there are now.

For 16 + 25 we write:

Putting all the ▲s together, we get eleven ▲s. of those ten ▲s make one **10**. And we are left with one ▲

Now putting together all the **10** s, we get four **10** s.

So, the total number of birds is 41.

In chapter 4, children would have made token cards. The same token cards should be used before children do written sums.
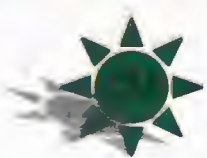
How many Cranes and Swans?

There are 31 cranes and 31 swans.

Let us find out how many swans and cranes are there in all.

In the same way, we will add the number of swans and cranes.

10   1

Number of Swans	3	9	10 10 10
Number of Cranes +	3	1	10 10 10

Also try adding without writing.

The total number of swans and cranes is _____
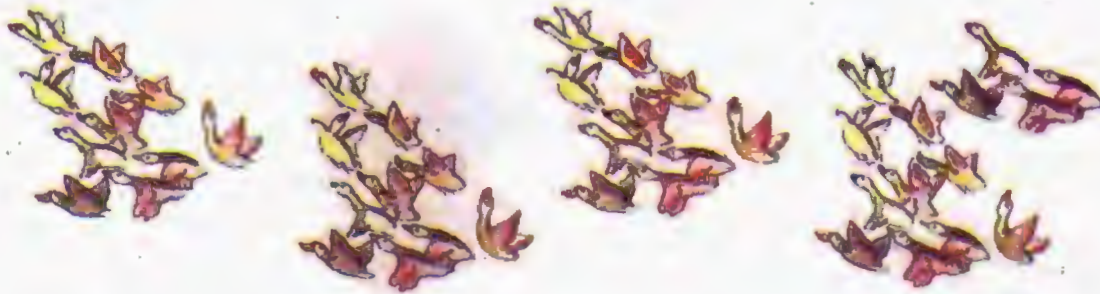
One morning, Aslam saw that out of 70 birds only 26 birds were left. The rest had gone away.

⊕ How many birds have gone away?

| 10 | ▲ 1 |

7	0
2	6

10 10 10
10 10 10 10
10 10

_____ birds have gone away.

Aslam, don't be sad! Let us hope they come back next year.

Practice Time

⊕ Sajad scored 23 runs in a cricket match and Akram scored 69. How many runs did they make in all?

10	1
2	
6	

+

Players	Scores
Sajad	23
Akram	69

They made _____ runs in all.

⊕ Dolma sold 48 shawls in a fair. Next day she sold 17 more shawls in all did she sell?

10	1

Dolma sold _____ shawls in all.

⊕ Bunny rabbit can eat 29 carrots in one week. Honey rabbit can eat 42 carrots in one week. Who eats more in a week, and by how much?

10	1

⊕ Khusboo is 29 years old. Her mother is 58 years old. How many years older is Khusboo's mother?

10

☐

Find the Answers

2	4
1	7

	2
2	7

6	8
1	3

5	4
4	3

7	3
	9

4	3
	7

5	4
4	3

7	3
5	9

4	3
2	7

More such examples may be set for practice

Catch the Right Bus!

Solve to get the bus number on each card. Match the card with the bus number and see who sit in which bus.

Bus no. 49   Bus no. 75   Bus no. 67

Card No.
27
+ 22
49

Card No.
48
+ 19

Card No.
88
- 21

Card No.
47
+ 28

Card No.
93
- 18

Card No.
37
+ 12

Card No.
38
+ 37

Card No.
25
+ 24

Card No.
99
- 32

136

Now you write your own numbers. Make two different cards for each bus.

+
75

-
49

+
67

+
67

+
75

+
49
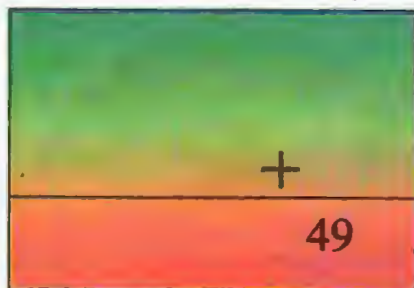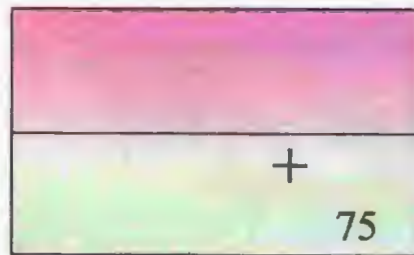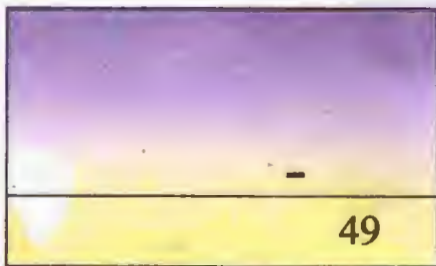
More such exercises can be done to make children see how any number can be made using different combinations of numbers by addition and subtraction.

Cross Me Out!

Come! Today, we will play 'cross me out' with our teacher.

Think of some numbers between 10 to 50. Write them in the box .Do not repeat a number

40 38 39
37 15 28
36 24 14
49 48 42

Cross out the number you get by adding 27 and 12!

27 + 10 = 37 and plus 2 is 39.

40 38 39
37 15 28
36 24 14
49 48 42

Parents can help children in playing this game. Call out simple addition sums like 18+4. Gradually proceed to more challenging additions. Also give children turns to speak out numbers while parents do the crossing out. Similar games can be used for subtraction as well.

Come on! Cross out 39!
Whoever crosses out all the numbers first will be the winner.

40 38 39
37 15 28
36 24 14
49 48 42

Now you can finish this game for Razia. Ask your teacher
or friend to speak out two numbers to add.

Chamacham Toli

Chamacham in Urdu means cleaning and shining.
Chamacham Toli is the name of a group of children who
work to clean their park.

Fiza collects the money and writes it in her diary.
Help Fiza to find how much money is left at the end
of the month.

Diary

October

October 3 – collected Rs 60

October 7 – bought a   broom for Rs 18

October 12 – bought a   phenyl bottle for Rs 25

October 25 – collected Rs 27 from the cards we made

Total money collected -

Total money spent -

Money left at the end of October -
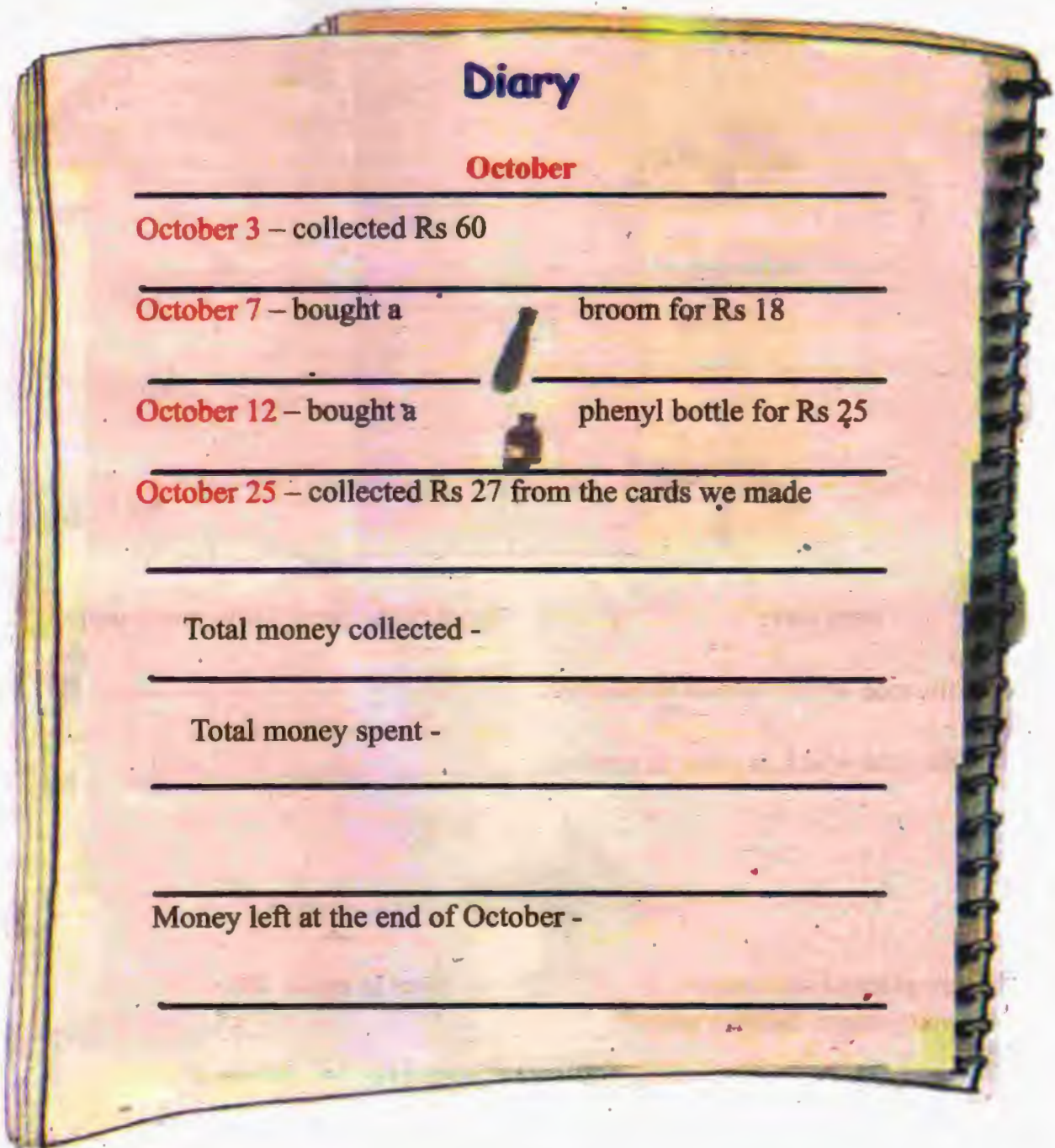
Children of Chamacham Toli counted the number of trees in the park.

Trees	Number of trees
	90
	75
	82
	68
	94

✦ ____ trees were ____ more than trees. How many more?

✦ Draw the tree which is least in number.

✦ Draw the tree which is most in number.

✦ Children planted some more ____ trees to make 100. How many more did they plant? _____

Chapter 12

How Many Ponytails?

Letters in Names

Ahmad

Aftab

Maria

Sahil
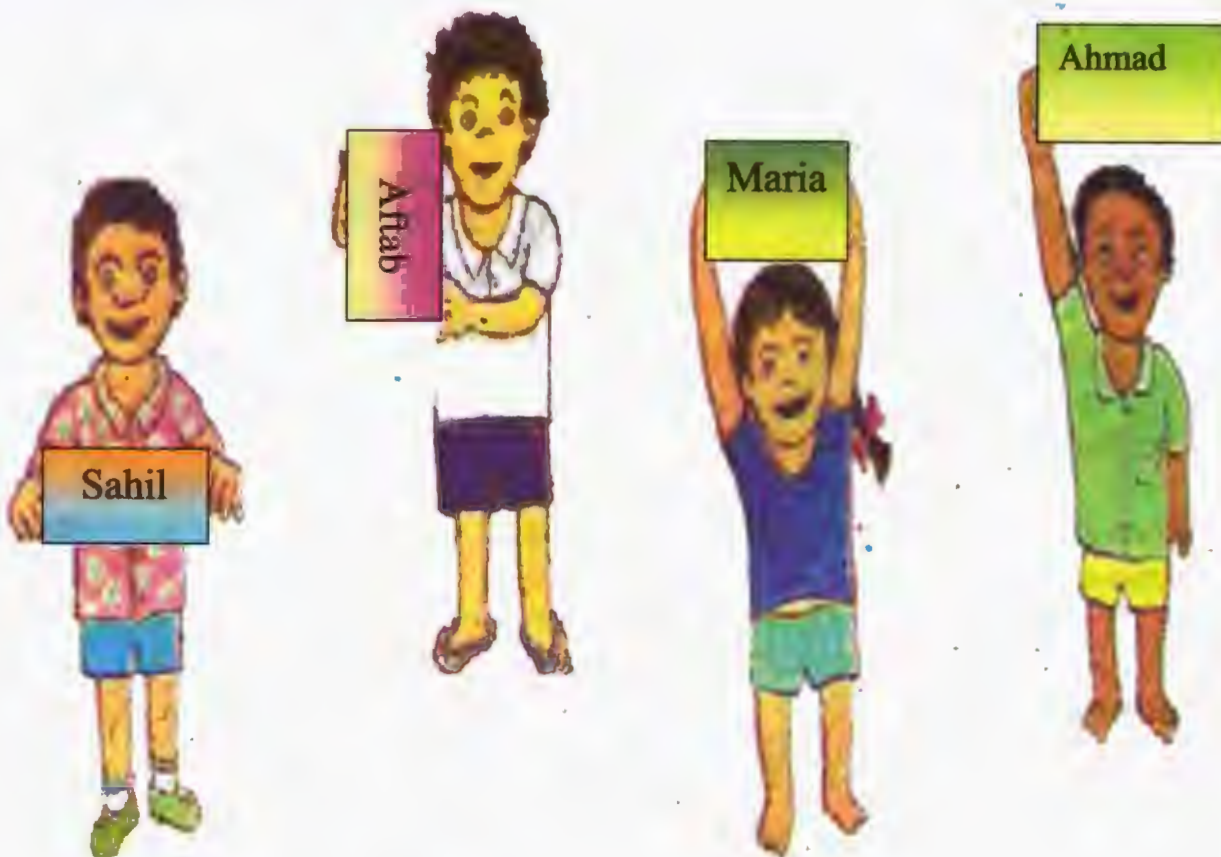
Ask your friends to write their names on a paper.

Find Out

A] The number of names ending with the same letter.

_____

B] One letter with which no name starts.

_____

C] The number of names starting with the same letter.

_____

Bananas, apples, oranges _ fresh fruits for you!

Fruit Seller

The fruit seller has many fruits for you.

Look at them and find out what the different fruits are.

Count and write

Fruit	Number of fruits

I like guavas! What do you like?
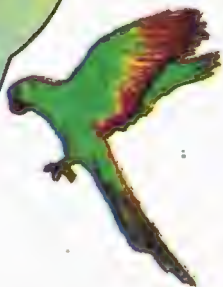
Hair Styles

Haya is going to school.

Her mother has combed   her hair.

Haya has two ponytails

Look at the children in your class.

All the children comb their hair in different ways.

Look and write down.

Hair Style	Number of Children

Find out and fill in the blanks:

A] The number of children with   is _____ than the

number of children with   [*more / less*]

b] _____ children have

144

Shoe Numbers

Look at the feet of children in your class. Everybody is wearing

shoes,   chappals or   sandals.

Look at the sole of the shoes or chappals

If there is a number
on the sole, it is your   shoe size.
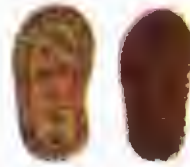
Fill in this table:

Shoe size	Number of Children
9	
10	
11	

Find out

a] How many have ⬤ 9 size shoes? _____ children.

b] The number of children with ⬤ 11 size shoes is _____.

c] The largest number of children have ⬤ size shoes.

d] The smallest number of children have ⬤ size shoes.

Water We Drink

We drink water every day.

Ask your friends how many glasses of water they drink in a day and write below.
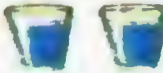
How many glasses?	Number of children

Find out

a] The number of children who drink ▯ glass of water is _____ .

b] ▯▯▯▯▯ glasses of water are drunk by _____ children.

·c] The number of children who drink ▯▯▯ glasses of water is _____ than children who drink ▯▯ glasses of water. [more / less]

The Colour You Like

There are many colours around you. Ask your friends about the colour they like most.
How many children like yellow?
Write the number in the table. Fill the table for other colours.

ked	Number of children
▯ Yellow	
▯	
▯	
▯	

Find out and colour the box

a] Most children like [   ] colour.

b] Children who like [   ] colour are more than

children who like [   ] colour.

c] Children who like [   ] colour

Multiplication Table of 2, 3 and 10

2 x 1 = 2	3 x 1 = 3	10 x 1 = 10
2 x 2 = 4	3 x 2 = 6	10 x 2 = 20
2 x 3 = 6	3 x 3 = 9	10 x 3 = 30
2 x 4 = 8	3 x 4 = 12	10 x 4 = 40
2 x 5 = 10	3 x 5 = 15	10 x 5 = 50
2 x 6 = 12	3 x 6 = 18	10 x 6 = 60
2 x 7 = 14	3 x 7 = 21	10 x 7 = 70
2 x 8 = 16	3 x 8 = 24	10 x 8 = 80
2 x 9 = 18	3 x 9 = 27	10 x 9 = 90
2 x 10 = 20	3 x 10 = 30	10 x 10 = 100

We can make tables using skip counting:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

$2 \times 1 =$ ☐ 2

$2 \times 2 =$ ☐ 4

$2 \times 3 =$ ☐ 6

•
•

$2 \times 10 =$ ☐ 20

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40

$3 \times 1 =$ ☐ 3

$3 \times 2 =$ ☐ 6

$3 \times 3 =$ ☐ 96

•
•
•

$3 \times 10 =$ ☐ 30

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

$10 \times 1 =$ ☐ 10

$10 \times 2 =$ ☐ 20

$10 \times 3 =$ ☐ 30

•
•
•

$10 \times 10 =$ ☐ 100

Patterns can also make tables:

and so on

$2 \times 1 = 2$ $2 \times 2 = 4$ $2 \times 3 = 6$ $2 \times 4 = 8$ $2 \times 5 = 10$
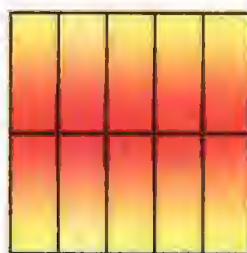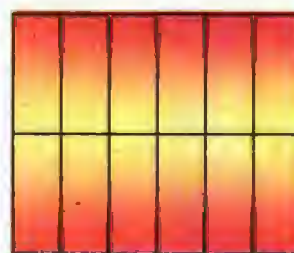
$3 \times 1 = 3$ $3 \times 2 = 6$ $3 \times 3 = 9$ $3 \times 4 = 12$ $3 \times 5 = 15$ and so on
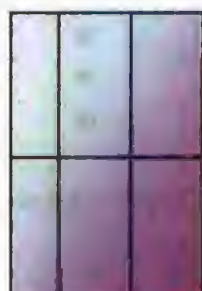
$4 \times 1 = 4$ $4 \times 2 = 8$ $4 \times 3 = 12$ $4 \times 4 = 16$ $4 \times 5 = 20$ and so on
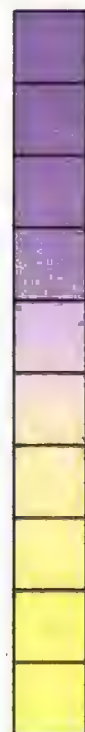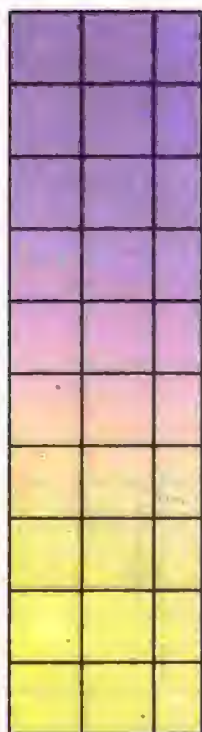
$10 \times 1 = 10$ $10 \times 2 = 20$ $10 \times 3 = 30$ $10 \times 4 = 40$ $10 \times 5 = 50$ and so on
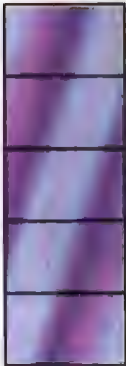
Activity – Write the product, using multiplication tables:

$3 \times 5 =$

$3 \times 6 =$

$3 \times 3 =$

$3 \times 1 =$

$3 \times 7 =$

$10 \times 3 =$

$2 \times 8 =$

$3 \times 4 =$

$2 \times 2 =$

$2 \times 6 =$

$2 \times 7 =$

$2 \times 10 =$

$10 \times 4 =$

$10 \times 7 =$

$2 \times 9 =$

Fill in the blanks:

$3 + 7 =$

$2 \times 5 =$

$10 \times 9 =$

$3 \times 8 =$

$10 - 7 =$

$6 + 8 =$

$3 \times 7 =$

$5 \times 2 =$

$3 \times 4 =$

$8 + 6 =$

$3 - 2 =$

$7 \times 3 =$

$5 \times 7 =$

$2 \times 5 =$

$7 - 3 =$

$10 \times 3 =$

$8 \times 4 =$

$4 \times 5 =$

Match the number given at the top:

20
2×10
10×2
10×2

27
$3 - 9$
$9 - 7$
3×9

40
2×9
10×2
$10 - 2$

30
$20 - 10$
$3 + 10$
$30 - 10$

21
3×7
$20 + 11$
$7 + 3$

14
2×8
2×7
$10 - 2$

Complete the tables:

+	2	4	6	8
2				
3			9	
10				

×	3	4	7	8
3				
2	6			
10				

×	4	6	7	10
2				
3				30
10				

+	4	1	5	7
10		11		
3				
2				

How many are there?

Legs in 4 elephants?

Books in 7 pairs?

Wheels in 8 bicycles?

Flowers in 6 pots?